



**Objectives of this Chapter:**

- 1.1 Introduction
- 1.2 Software – It's types
- 1.3 Different Types of Office Tools
- 1.4 Online Office Tools

**1.1 INTRODUCTION**

Office Tools include some application softwares. These softwares are designed to make computer users more productive and efficient at their workplace. Usually these tools/softwares are used to create, update, manage documents, handle large data, create presentations etc. These tools help users to save their large amount of time and effort. Lots of repetitive tasks can be done very easily with the help of various office tools. Examples of such tools/softwares are: Word Processors, Presentation Tools, Spreadsheet softwares, database management tools, graphics tools etc. As the internet becomes an important tool for businesses, many new online office apps and tools are being used all over, such as Google Docs, Google Sheets, Google Slides, Google Drive, Microsoft One Drive, Gmail, Google Forms etc. In this chapter, we are going to have a look on some of these commonly used offline and online tools.

**1.2 SOFTWARE AND IT'S TYPES**

Computer Software plays the role of mediator between the user and computer hardware. A Software is a set of programs that enable a user to perform some specific task or used to operate a computer. These are the softwares that direct all the peripheral devices on the computer system – what to do and how to perform a task. Hardware and Software work together to accomplish a task. Without software, a user can't perform any task on a computer. Software can be further divided into mainly two types: Application Software and System Software.



Fig: 1.1 Types of Software

### 1.2.1 System Software:

System software is a collection of system programs. These softwares are designed to operate, control, and extend the processing capabilities of the computer itself. These softwares are usually written in Low-Level Computer Programming languages, such as Assembly Language etc. Low-Level programming languages have the capability to interact with the hardware at a very basic level. System softwares are generally prepared by the computer manufacturers. Some examples of system software are Operating System (Windows, Linux etc.), Language Translators (Compilers, Interpreter, Assemblers), etc.

### 1.2.2 Application Software

Applications softwares are also known as End-User Applications. These softwares are mostly designed and developed to perform specific tasks for users. Application softwares are used by users as per their requirements. Different users have different requirements. So, every user may use different types of softwares according to his/her requirements, for example: a photographer usually uses application software - photoshop to edit photographs, an accountant usually uses application software - Tally for maintaining accounting records, office-users uses application softwares - word processors etc. to prepare documents etc.

These softwares are usually written in various types of High-Level Computer Programming languages, such as Java, Visual Studio .NET etc. These softwares reside above the system software. Application software cannot run without the support of Operating System.

Various types of Office Tools also fall in the category of application softwares. Users use various types of application softwares (office tools) in the computers at their workplaces (offices) to perform office related specific tasks, such as creating word processor documents, spreadsheets, presentations, graphics, sending the email, etc.

## 1.3 DIFFERENT TYPES OF OFFICE TOOLS

Application software that support users in regular office jobs like creating, updating and maintaining documents, handling large amounts of data, creating presentations, scheduling, etc. are called office tools. Using office tools saves time and effort and lots of repetitive tasks can be done easily. Some of the software that perform these operations are –

1. Word processor Softwares
2. Spreadsheet Softwares
3. Presentation Software
4. Database Systems

#### 5. Multimedia Tools, etc.

We have already learnt about many of these tools in very detail in the previous classes. So, we are going to have an overview of these tools:

##### 1.3.1 Word Processor Tools:

A software for creating, storing and manipulating text documents is called word processor. In simple words, we can say that Word Processor is a software that is used to manage text documents. User can create, update and format text files using word processor. A word processor is an essential part of any office suite. A word processor usually runs on local machine as a desktop application like Microsoft Word, but nowadays cloud based Word Processors like Google docs are also used which makes it easier for teams to manage their documents on cloud.

##### Examples of some word processors are:

1. **MS-Word:** Retail Cross-Platform word processor
2. **Word Pad:** Retail Windows only word processor
3. **Word Perfect:** Retail Cross-Platform word processor
4. **Google Docs:** Freeware Cloud Based word processor
5. **Open Office Writer:** Open Source word processor

##### 1.3.2 Spreadsheet Softwares

Spreadsheet is a software that allows users to process and analyse tabular data easily. It is a computerized mathematical and accounting tool. In a Spreadsheet, data is always stored in cells. A cell is an intersection of rows and columns. Users can use functions and formulas very easily to process data stored in the cells. Spreadsheets are usually used to maintain budget, financial statements and sales records etc.

##### Examples of some spreadsheet software are:

1. **MS-Excel:** Retail Cross-Platform spreadsheet package
2. **Google Sheets:** Freeware Cloud Based spreadsheet package
3. **OpenOffice Calc:** Open Source spreadsheet package

##### 1.3.3 Presentation Softwares

A Presentation Tool enables users to demonstrate information in the form of a slide show. This information is broken into small pieces called slides. A series of slides that present information about some idea or concept to an audience is called a presentation. The slides in the presentation can have text, images, tables, audio, video or any other multimedia information.

##### Examples of some presentation tool are:

1. **MS-PowerPoint:** Retail Cross-Platform presentation tool
2. **Lotus Freelance:** Proprietary software presentation tool
3. **Google Slides:** Freeware Cloud Based presentation tool

#### 4. **OpenOffice Impress:** Open Source presentation tool

#### 1.3.4 Database Management Systems

DBMS (Database Management System) is a software that manages data by creating databases. A database is an organised collection of data. It is a computerized approach for managing data of organizations.

#### Examples of some Database Management Systems are:

1. **My SQL:** GPL (General Public License) or Proprietary Open-Source Relational Database Management System
2. **Postgre SQL:** Free and Open-Source Relational Database Management System
3. **Oracle:** Proprietary Software for Relational Database Management System
4. **MS Access:** Retail database tool by Microsoft
5. **Open Office Base:** Open Source database tool

#### 1.3.5 Multimedia Tools

Multimedia is a form of communication that combines different forms of contents such as text, audio, images, animations, or video into a single presentation. Multimedia tools allow users to create multimedia applications/contents using various forms of contents. In offices, multimedia tools are used to create and play business presentations, for employee's training purpose, for advertising and documentaries. Adobe Flash, Media Players and Real players are the examples of multimedia tools.

So far, we have introduced various important and essential office tools to perform different types of tasks in office environment. Besides these, there are various other office tools which can be used for communication (such as emails, group chat, video conferencing etc), cloud storage (such as google drive, one drive etc.), various types of conversions (such as pdf to word, word to pdf, jpg to pdf etc.), file compression (such as winzip, winrar, 7zip etc.) etc.

#### 1.4 ONLINE OFFICE TOOLS

As the internet becomes an ever more important tool for business, many new online office apps and tools are being used all over. Online office tools are those office tools that are offered in the form of web applications. These tools are accessed online using a web browser. It allows people to work together worldwide and at any time. Such accessibility leads to web-based collaboration and virtual teamwork. Some online office tools can be installed on office-computers, while other are offered only as Software as a Service (SaaS). Of the latter, basic versions can be offered for free, while more advanced versions are often made available with a subscription fee.

#### 1.4.1 Common Online Office Tools:

Google apps for office work covers all our business needs and has the added advantage of getting all our apps delivered from the same source. So, there are no concern of incompatibility. We are



also guaranteed about the security of our data and efficiency of the tools. Google Docs, Google Sheets and Google Slides are the Google Apps that are commonly used as online office tools.

Files created in these Google Apps (Google Docs/Sheets/Slides) can be stored both online on the Google cloud or on the user's computer. Access to these files is available from any computer with an Internet connection and a fully-featured Web browser. The files created in Google Docs/Sheets/Slides may be viewed by other google groups and members with the file owner's permission. These Google Apps (Docs, Sheets, and Slides)are also available as mobile apps on Android and iOS and as a desktop application on Google's Chrome OS.

These Google Apps are included as part of the free, web-based Google Workspace (also known as G Suite). Multiple people can work on the same file created in these Apps and Apps will save all of them automatically. These Google Apps also offers the benefit of cloud storage. It means users' files are saved automatically on an online storage, and these files may be retrieved even if our computer's hard drive fails. Now, Let's take a look at these popular online office tools from Google for our paperless office:

#### 1.4.1.1 Google Docs

Google Docs is a free online word processor. It is a Web-based document management application for creating and editing documents. It helps us in real time online word processing. Google Docs allows us to export its document file in all major file types including .docx, .pdf, .odt, .rtf, .txt, and .html.

#### Opening Google Docs:

Google Docs is available on all devices and platforms; all we need is an internet connection and a web browser (in the case of mobile, the applicable apps). Docs supports several different file types, including .doc., .docx., .txt, .rtf, and .odt, making it easy to view and convert Microsoft Office files directly from Google Drive.

Following are the steps to open and to work with Google Docs:

1. Open any Web Browser, For Example: Google Chrome
2. Type the url <https://docs.google.com> in the address bar of the web browser.
3. The first thing we'll need to do before we can use Google Docs is sign up for a Google account (an @gmail account). If we already have an account, we can move on to the next step. If not, we'll go over the simple way to create a Google account.
4. After Successful Sign-in into the google account, the Home page of Google Docs will appear in the web browser as shown in the figure 1.3



Fig: 1.2  
Sign-In page for Google Account

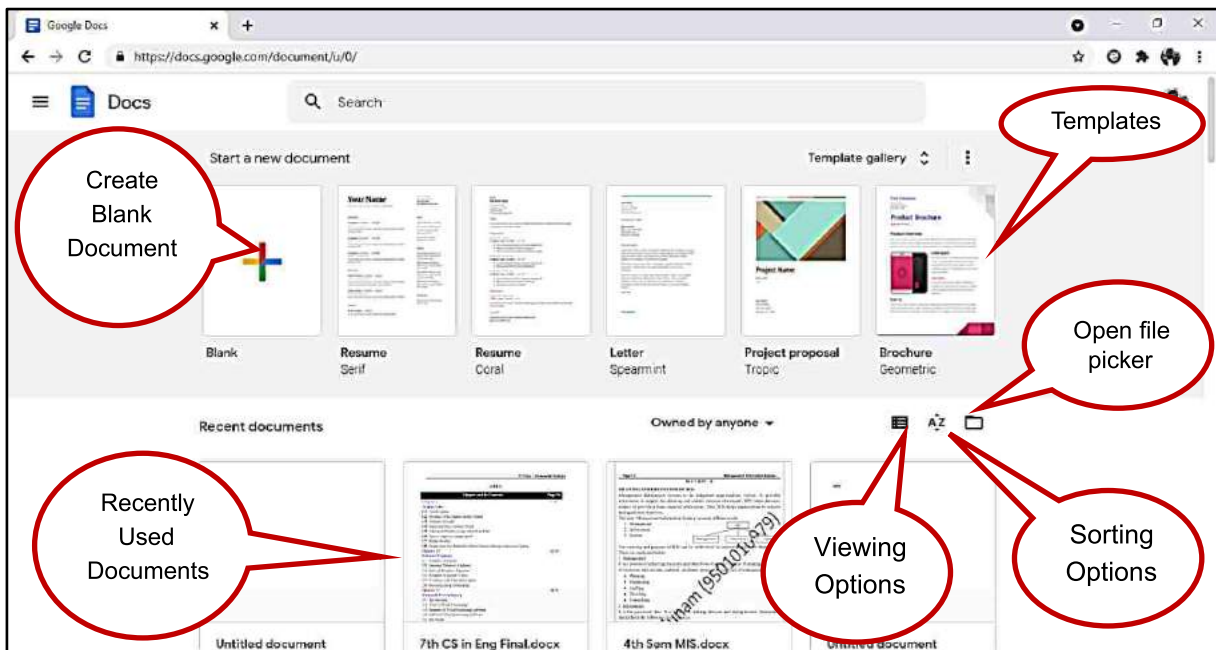


Fig: 1.3 Homepage of Google Docs

### Creating a Blank Document using Google Docs:

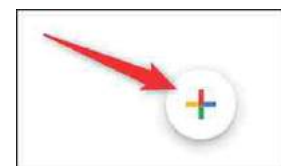
After Signing-in into a Google account, it's time to create our first document. The Homepage of Google Docs shows two sections:

1. **Start a new document:** It shows Blank document option along with various templates for creating documents in template gallery.
2. **Recent documents:** It shows the list of recently used document files in the Google Docs application. It also shows **View Options**, **Sort Options** and **Open file picker** option at the top right side of this section.

To create a blank document, Move the cursor on the multi-coloured “+” icon in the **Start a new document** section of Google Docs Homepage. Now click it to open a Blank document in the Google Docs.

### Opening a Microsoft Word Document using Google Docs:

We can also open the word document files in the Google Docs. For this purpose, we have to upload and import the word document file in the Google Docs. When we import a Word document, we can use either Google Docs or Google Drive to upload our files. Both methods allow us to drag and drop a file from our computer directly into the web browser for easy uploads. Our Google Drive stores all of our uploaded files, but for convenience sake, whenever we open the Docs homepage, it only shows us document-type files.



From the Google Docs homepage, click the Open file picker (folder icon) option in the top right corner of Recent documents section (as shown in figure 1.3). It will display '**Open a file**' dialog box (as shown in figure 1.4) to select the word document file. Click the “Upload” tab of this dialog

box. Now click on the '**Select a file from your device**' button to select the word document file saved in our computer system or just drag and drop the word document file in the '**Drag a file here**' area of upload tab.

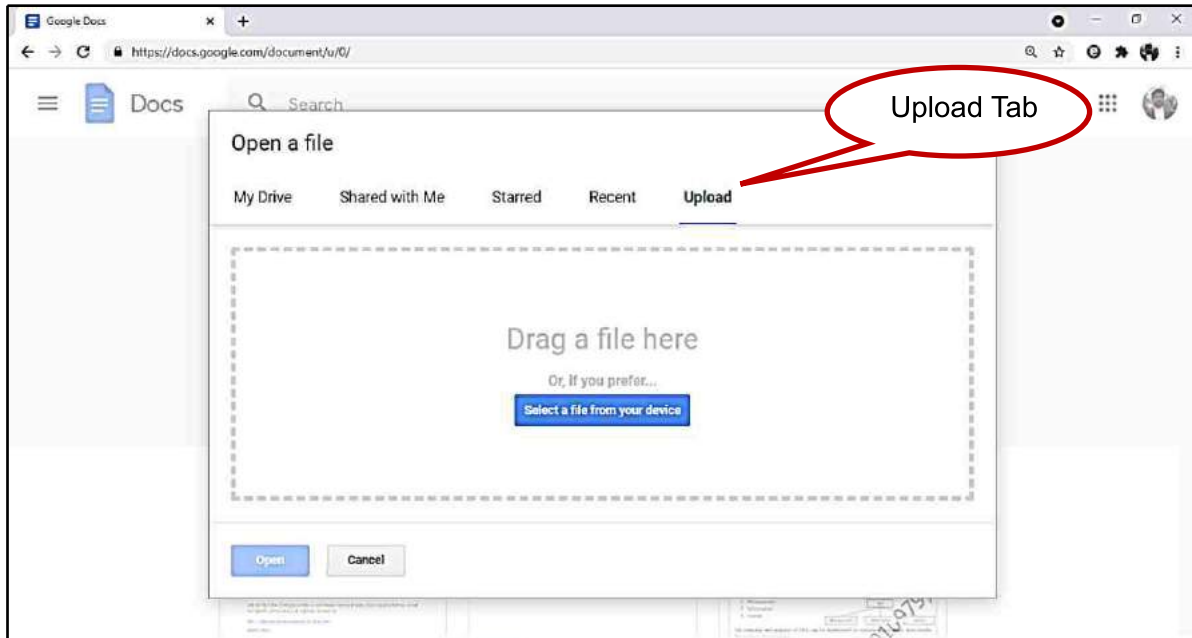


Fig: 1.4 Open a file dialog box to upload word document

Once the Word file uploads, Docs opens it automatically, ready for us to start to edit, share, and collaborate.

If we want to open a document from the list of recently used files, then just click on that file from our Google Docs homepage. Once the file opened in google docs, we can work with it in three different modes as shown in the figure 1.5

- 1. Editing Mode:** In this mode, we can edit the document directly
- 2. Suggesting Mode:** In this mode, editing in document will become suggestions for the author of the document.
- 3. Viewing Mode:** In this mode, we can only read or print the opened document.



Fig: 1.5 Different Modes of Working with files

When we are in Editing or Suggesting Mode, we can do formatting and editing of the document in the same way as we do it in the Microsoft Office Word (about which we had learnt in our previous classes)

### Downloading document files from Google Docs:

When we finish with the document, we can download our document back into DOCX, PDF, ODT, TXT, HTML, EPUB format. To download the document, perform the following steps:

1. Click on File menu
2. Click on Download option
3. From the Download Submenu, click on the desired format

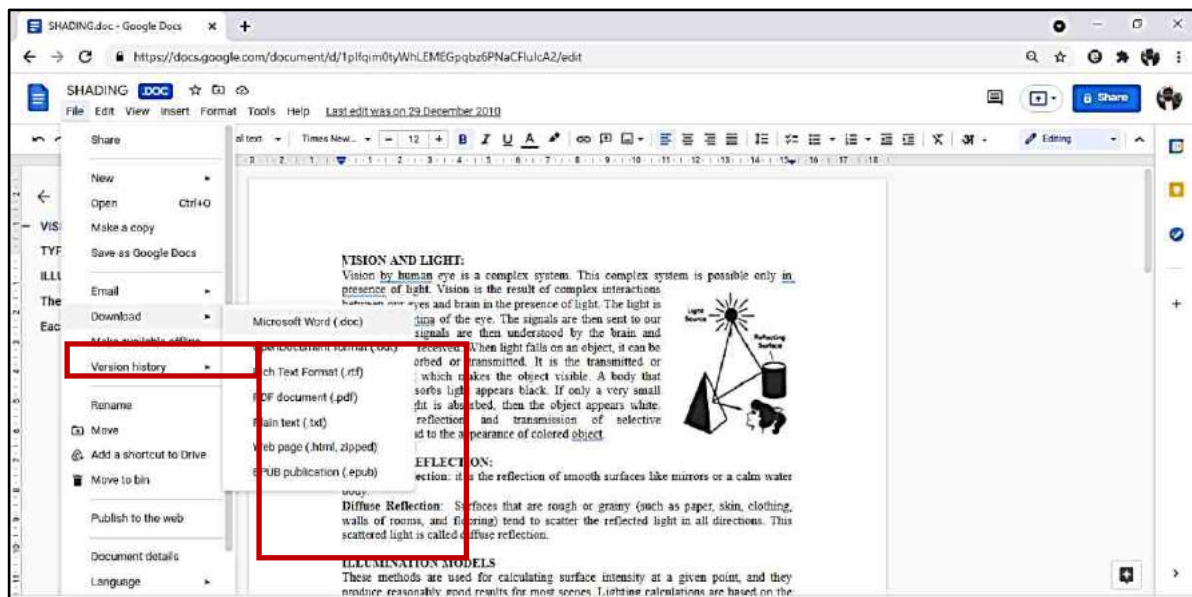


Fig 1.6 Download document file from Google Docs

It will download directly to the location where files are saved from our web browser.

### Collaborating on Documents with Others:

One of the best features of Google Docs is the ability to generate a shareable link. It allows anyone with it to either view, suggest edits, or edit our document. Instead of sending a file back and forth between collaborators, we can make edits and suggestions all at once, as if we were all together working over the same computer in real time. The only difference is that each person has their own text entry cursor to use on their personal computer.

From the document that we want to share, click on the blue button “Share” to choose how and with whom you want to send a link of our file. Here, two sections will be shown:

- 1. Share with people and groups:** In this section, we can enter email addresses manually to whom we want to send a link of our file through email.

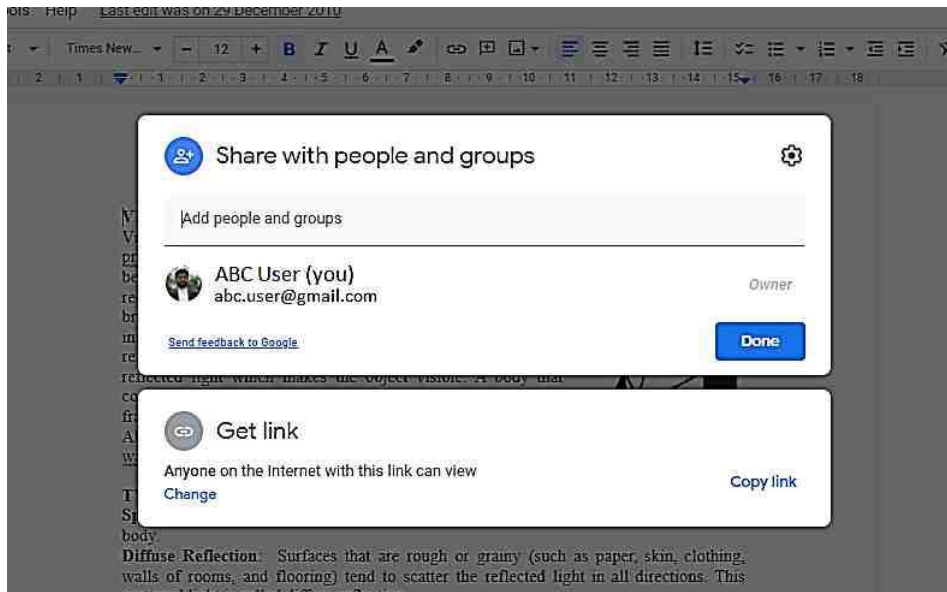


Fig: 1.7 Share with people and groups

**2. Get link:** In this section, we can get a link that can be shared by our self for inviting other persons to view or work on our document. We can also set the restrictions and various types of permissions for other users having the link. If we want to stop sharing our document, then we can use the **Restricted** option as shown below in figure, otherwise for sharing the document we have to choose the option – **Anyone with the link**.

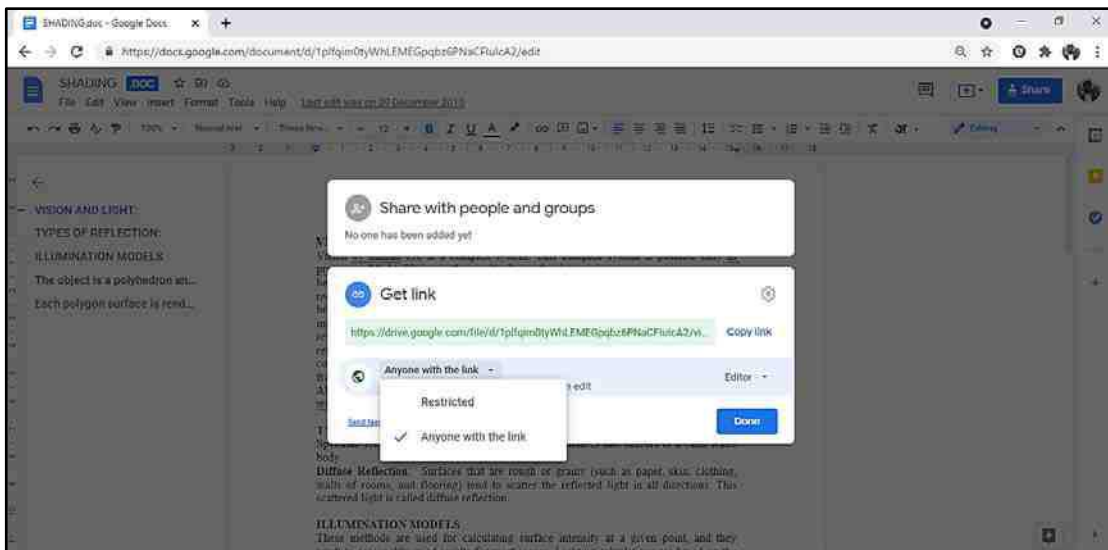


Fig: 1.8 Get Link options

After setting the option- Anyone with the link, we can set one of the following access levels using the drop-down menu for sharing the file:

**1. Viewer:** If we choose this access level for sharing, then anyone on the internet with this link can view the document, but can't edit it in any way. This is the default action when we share a file, and the best option if we are trying to share a file for download. Viewers of the file can also see comments and suggestions of our document.



2. **Commenter:** If we choose this access level for sharing, then anyone on the internet with this link can comment on our document. It is helpful for shared users to leave comments if desired— This is great for team projects.
3. **Editor:** If we choose this access level for sharing, then anyone on the internet with this link can edit our document. This access level gives full read/write access to shared user. But, they still can't delete it from our Drive, though-this is just for the contents of the file.

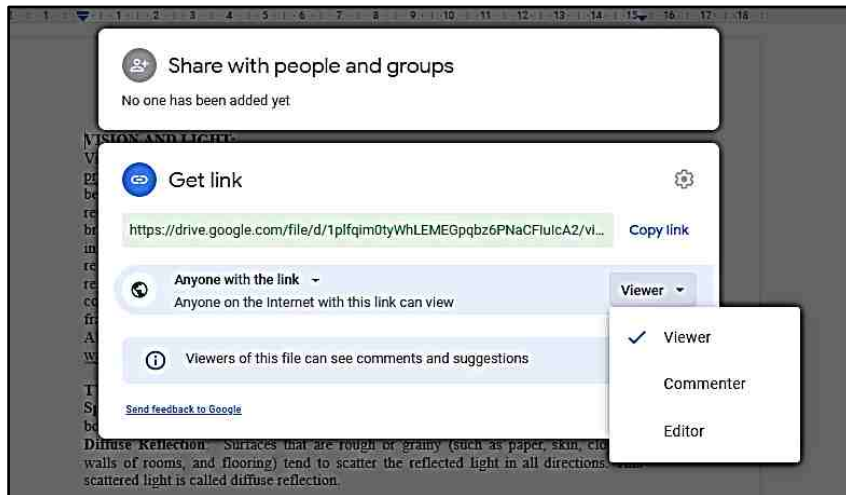
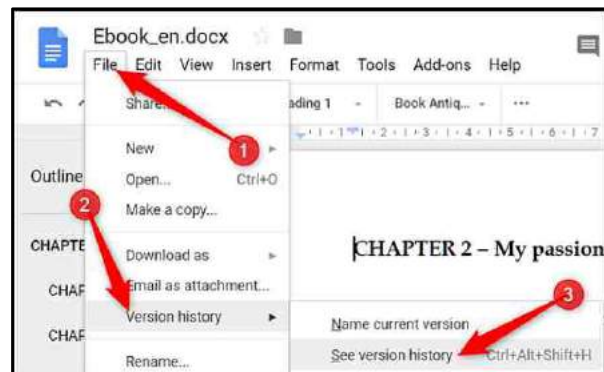


Fig: 1.9 Access Levels for shared users

### Viewing All the Recent Changes to a Document:

When we share documents with others, it's difficult to keep track of all the small changes that are made by other users. For that, there's version history. Google Docs keeps track of all the changes that occur in a document and groups them into periods. We can even revert a file to any of the previous versions listed in the history with the click of a mouse.



We can view a list of all recent changes by performing the following steps:

1. Click on File menu
2. Click on Version History
3. From submenu, click on See Version History



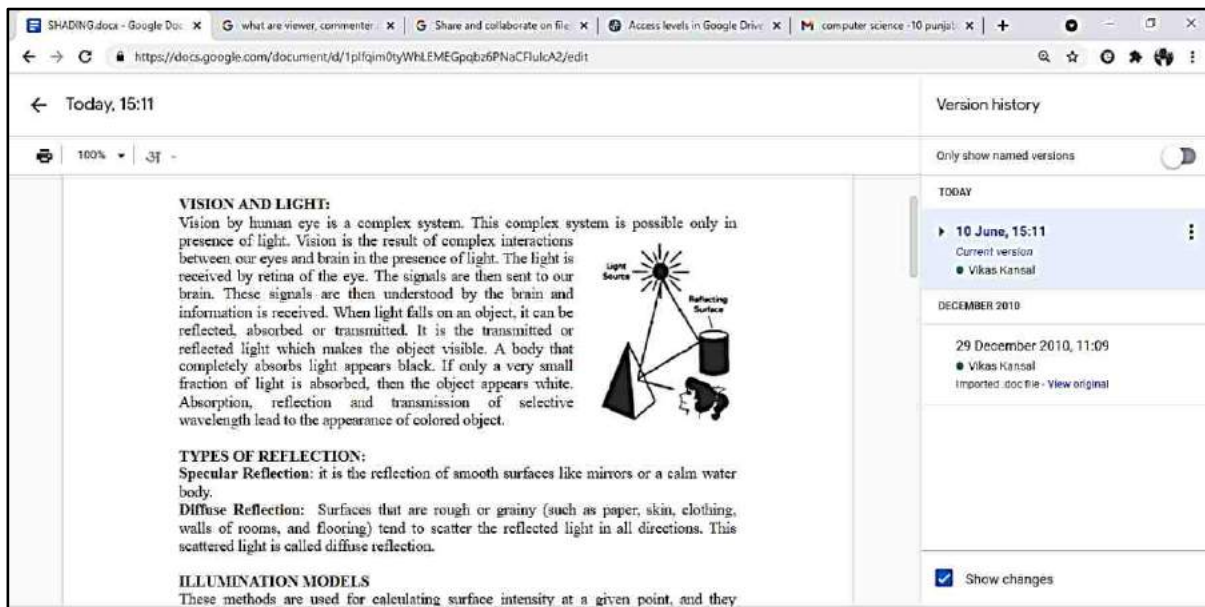


Fig: 1.10 Version History of document file

### 1.4.1.2 Google Sheets

Google Sheets is a free online spreadsheet web application. It includes nearly all capabilities of a traditional spreadsheet program such as Microsoft Excel. It comes with excellent data analysis tools along with powerful functions and formulas for performing calculations. We can also insert charts, create pivot table reports and apply filters etc. in the spreadsheets. The sheets may be viewed by other google groups and members with the spreadsheet owner's permission. We can export the file in all major file types including .xlsx, .csv, .html, .ods, .pdf, and .txt.

#### Opening Google Sheets:

Google Sheets is available on all devices and platforms; all we need is an internet connection and a web browser (in the case of mobile, the applicable apps). Google Sheets supports several different file types, including .xlsx, .csv, .html, .ods, .pdf, and .txt. making it easy to view and convert Microsoft Office files directly from Google Drive.

Following are the steps to open and work with Google Sheets:

1. Open any Web Browser, For Example: Google Chrome
2. Type the url <https://sheets.google.com> in the address bar of the web browser.
3. Sign-In into the google account.
4. After Successful Sign-in into the google account, the Homepage of Google Sheets will appear in the web browser as shown in the figure 1.11

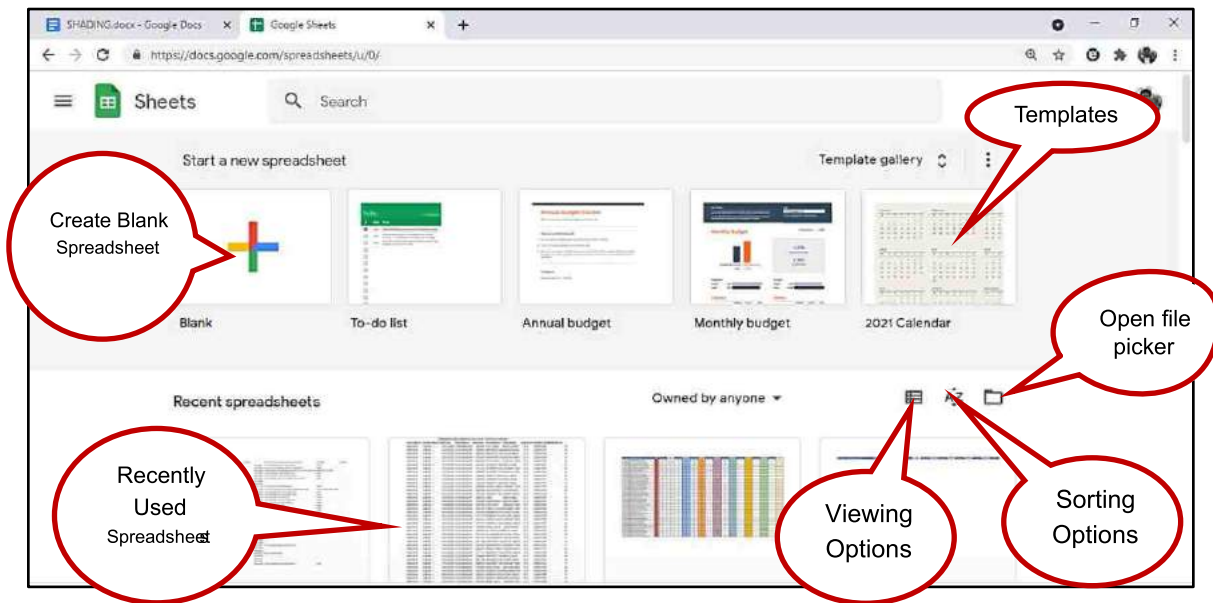


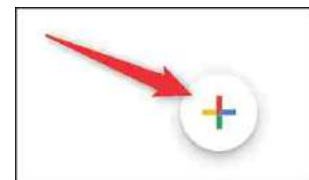
Fig: 1.11 Homepage of Google Sheets

### Creating a Blank spreadsheet using Google Sheets:

After Signing-in into a Google account, it is time to create our first spreadsheet. Similar to Google Docs' Homepage, the Homepage of Google Sheets also shows two sections:

1. **Start a new spreadsheet:** It shows Blank spreadsheet option along with various templates for creating spreadsheets in template gallery.
2. **Recent spreadsheets:** It shows the list of recently used spreadsheet files in the Google Sheets application. It also shows **View Options**, **Sort Options** and **Open file picker** option at the top right side of this section.

To create a blank spreadsheet, Move the cursor on the multi-coloured “+” icon in the **Start a new spreadsheet** section of Google Sheets Homepage. Now click it to open a Blank spread sheet in the Google Sheets.



Other features of Google sheets work in the same way as we did with the Google Docs, in the previous section of this chapter. Formatting and Editing in Google Sheets is also done in same way as we do in the Microsoft Office Excel.

#### 1.4.1.3 Google Slides

Google Slides is a free presentation web application. It was formerly known as Google Presentations. It allows us to create better looking presentations from our browser. It includes nearly all the capabilities of a traditional presentation program, such as Microsoft PowerPoint. Google slides support the .ppt, .pptx, .pptm, .pps, .ppsx, .ppsm, .pot, .potx, and .potm presentation file types.

## Opening Google Slides:

Google Slides is available on all devices and platforms; all we need is an internet connection and a web browser (in the case of mobile, the applicable apps). Google Slides supports several different file types, including .ppt, .pptx, .pptm, .pps, .ppsx, .ppsm, .pot, .potx, and .potm making it easy to view and convert Microsoft Office files directly from Google Drive.

Following are the steps to open and work with Google Slides:

1. Open any Web Browser, For Example: Google Chrome
2. Type the url <https://slides.google.com> in the address bar of the web browser.
3. Sign-In into the google account.
4. After Successful Sign-in into the google account, the Homepage of Google Slides will appear in the web browser as shown in the figure 1.12

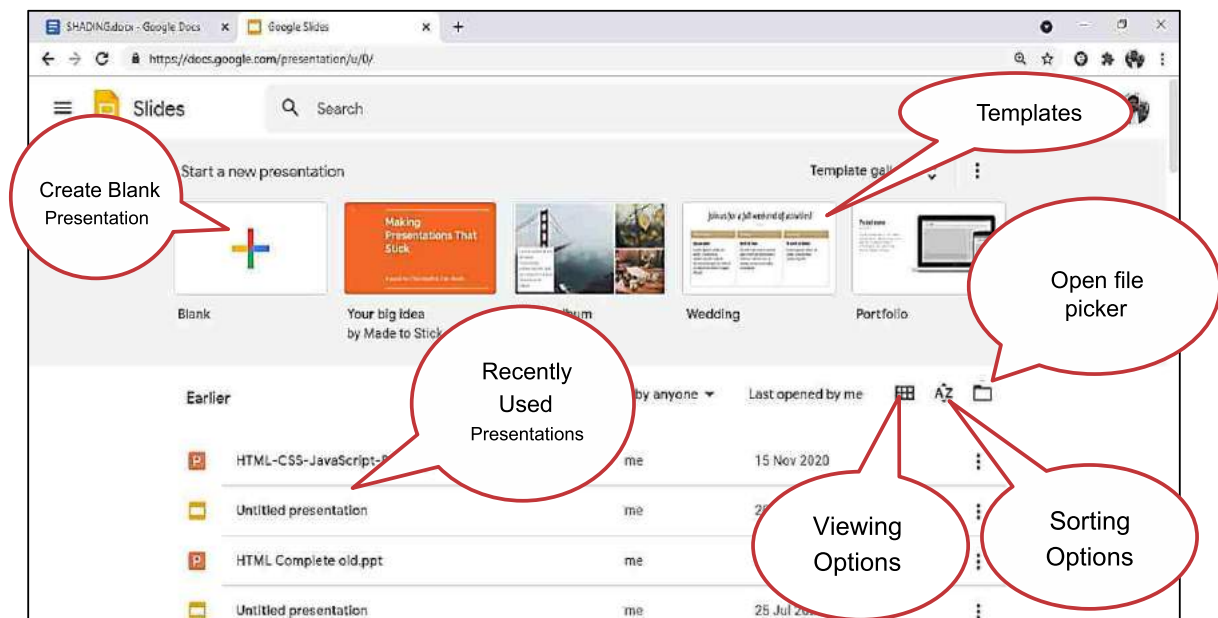


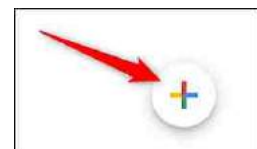
Fig: 1.12 Homepage of Google Slides

## Creating a Blank presentation using Google Slides:

After Signing-in to a Google account, it's time to create our first presentation. Similar to Google Docs' Homepage, the Homepage of Google Slides also shows two sections:

1. **Start a new presentation:** It shows Blank presentation option along with various templates for creating presentations in template gallery.
2. **Earlier:** It shows the list of recently used presentation files in the Google Slides application. It also shows **View** Options, **Sort** Options and **Open file picker** option at the top right side of this section.

To create a blank presentation, Move the cursor on the multi-coloured “+” icon in the **Start a new presentation** section of Google Slides Homepage. Now click it to open a Blank presentation in the Google Slides.



Other features of Google Slides work in the same way as we did with the Google Docs, in the previous sections of this chapter. Formatting and Editing in Google Slides is also done in same way as we do in the Microsoft Office PowerPoint.

All these apps – Google Docs, Google Sheets and Google Slides has also been integrated with the Google Drive. Google Drive is a cloud-based storage solution which provides us the online storage of many types of files. These files can be accessed from many different devices such as mobiles, tablets, desktop computers, laptops etc.

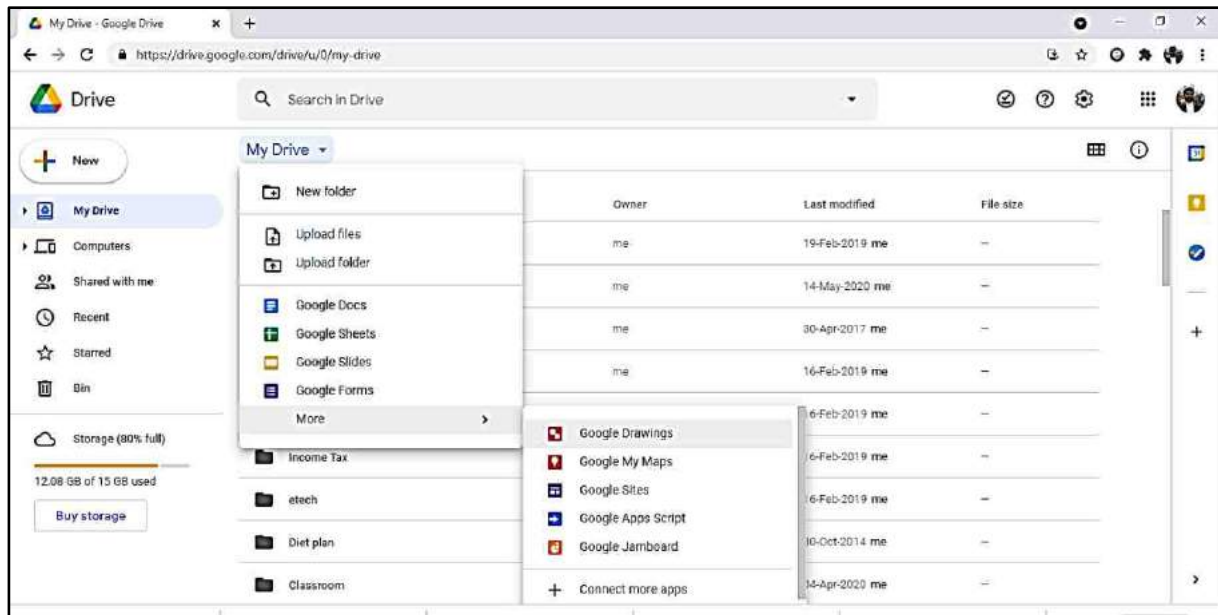


Fig 1.13 Google Drive and Other Integrated Office Apps

Online office tools discussed so far has their advantages and disadvantages too. An overview of these advantages and disadvantages of using online office tools are given below:

#### 1.4.2 Advantages and Disadvantages of Online Office Tools:

Using online office tools has their own advantages and disadvantages. Some of the important advantages and disadvantages are given below:

##### 1.4.2.1 Advantages of Using Online Office Tools:

1. The cost is low. In most cases, there is no specific charge for using the service for users who already have access to a computer with a web browser and a connection to the Internet.
2. There is no need to download or install the tools/software.
3. Online office tools can run on thin clients (N Computing) with minimal hardware requirements.
4. Online office tools provide the ability to share files.
5. There is no need to purchase or upgrade a software license. Instead, the online office suite is available in the form of Software as a Service.

6. Online office tools are portable. Users can access their documents from almost any device with a connection to the Internet, regardless of which operating system they use.
7. If the user's computer fails, the documents are still safely stored on the remote server.

#### 1.4.2.2 Disadvantages of Using Online Office Tools:

1. Access requires connectivity—if the remote server or network is unavailable, the content will also be unavailable.
2. There are speed and accessibility issues. Most of the available online office tools require a high speed (broadband) Internet connection. That can be a problem for users who are limited by a slower connection to the Internet.
3. The number of features available is an issue. Online office suites tend to lack the advanced features available on their offline counterparts.
4. In the long term, if there is a subscription charge to use the service, the ongoing subscription cost may be more expensive than purchasing offline software upfront.
5. The user has no control over the version of the software used. If the software is changed the user is forced to use the changed version, even if the changed version is less suited to the user.
6. The user is reliant on the service provider for security and privacy of their documents.

#### 1.4.3 Offline Vs Online Office Tools:

Following table shows the comparison between Offline and Online Office Tools:

Offline Office Tools	Online Office Tools
1. No internet connection is required for using these tools	1. Internet connection is required for using these office tools.
2. Files created in offline office tools are stored in the local storage of computer system	2. Files created in online office tools are stored on the cloud storage.
3. Files can be accessed only on the local computer system where they are stored	3. Files can be accessed from anywhere in the world as files are stored at online storage media
4. Files cannot be shared easily. Third party tools can be used to share files with others.	4. File can be shared easily as these tools have the inbuilt option to share files.
5. Multiple people cannot work on the same file created in these Apps.	5. Multiple people can work on the same file created in these Apps.
6. Examples: MS Word, Excel, PowerPoint etc.	6. Examples: Google Docs, Google Sheets, Google Slides etc.

Table: 1.1 Comparison between Offline and Online Office Tools



### Points to Remember

1. A Software is a set of programs that enable a user to perform some specific task or used to operate a computer.
2. System software is a collection of system programs that are designed to operate, control and extend the processing capabilities of the computer itself.
3. Applications softwares are also known as End-User Applications which are mostly designed and developed to perform specific tasks for users.
4. Application software that support users in regular office jobs like creating, updating and maintaining documents, handling large amounts of data, creating presentations, scheduling etc. are called office tools.
5. A software for creating, storing and manipulating text documents is called word processor.
6. Spreadsheet is a software that allows users to process and analyse tabular data easily.
7. A Presentation Tool enables users to demonstrate information in the form of a slide show.
8. Multimedia is a form of communication that combines different forms of contents such as text, audio, images, animations, or video into a single presentation.
9. Online office tools are those office tools that are offered in the form of web applications.
10. Some online office tools can be installed on office-computers, while other are offered only as Software as a Service (SaaS).
11. Google Docs is a free online word processor. It is a Web-based document management application for creating and editing documents.
12. Once the file opened in google docs, we can work with it in three different modes – Editing, Suggesting and Viewing
13. Google Sheets is a free online spreadsheet web application.
14. Google Slides is a free presentation web application that allows us to create better looking presentations from our browser.
15. Google Docs, Google Sheets and Google Slides has also been integrated with the Google Drive.



## EXERCISE

### Que:1 Multiple Choice Questions:

- I. Which of the following is an example of office tool?
  - a. MS Word
  - b. Google Slides
  - c. MS PowerPoint
  - d. All of these
- II. Which of the following is the example of Word Processor?
  - a. Google Docs
  - b. Google Sheets
  - c. Google Drive
  - d. MS Excel
- III. Which of the following is not an example of Google's Online Office Tool?
  - a. Google Slides
  - b. Google Docs
  - c. Open Office Writer
  - d. Google Sheets
- IV. Which softwares are designed to operate, control and extend the processing capabilities of the computer itself?
  - a. Application Software
  - b. System Software
  - c. Google's online office tools
  - c. All of these
- V. \_\_\_\_\_ is a set of programs that enable a user to perform some specific task.
  - a. Software
  - c. Hardware
  - c. Language Translators
  - d. Programming Languages
- VI. After setting the option “Anyone with the link”, we can set one of the following access levels using the drop-down menu for sharing the file created in Google Docs?
  - a. Viewer
  - b. Commenter
  - c. Editor
  - d. All of these

### Que:2 Fill in the Blanks

- I. Application Softwares are also known as \_\_\_\_\_
- II. System softwares are usually written in \_\_\_\_\_ level Computer Programming Languages.
- III. Various types of Office Tools fall in the category of \_\_\_\_\_ softwares.
- IV. \_\_\_\_\_ is a software that allows users to process and analyse tabular data easily.
- V. \_\_\_\_\_ is a free online word processor.

### **Que:3 Short Answer Type Questions**

- I. Define Office Tools.
- II. What is Application Software?
- III. Write some examples of Word Processor Tools.
- IV. Write about Multimedia Tools.
- V. Explain Google Docs.

### **Que:4 Long Answer Type Questions**

- I. What are Softwares? Explain different types of softwares.
- II. What are the advantages and disadvantages of using online office tools?
- III. Compare Offline and Online Office Tools.