

MALAD KANDIVALI EDUCATION SOCIETY'S

NAGINDAS KHANDWALA COLLEGE OF COMMERCE, ARTS & MANAGEMENT STUDIES & SHANTABEN NAGINDAS KHANDWALA COLLEGE OF SCIENCE MALAD [W], MUMBAI – 64 (AUTONOMOUS)

(Reaccredited 'A' Grade by NAAC)
(AFFILIATED TO UNIVERSITY OF MUMBAI)
(ISO 9001:2015)

CERTIFICATE

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Roll No: 24 Programme: BSc IT Semester: II

This is certified to be a bonafide record of practical works done by the above student in the college laboratory for the course **IT platforms**, **Tools and Practices** (Course Code: **2026UISTP**) for the partial fulfillment of Second Semester of BSc IT during the academic year 2020-2021.

The journal work is the original study work that has been duly approved in the year 2020-2021 by the undersigned.

External Examiner

Subject-In-Charge

(Ms.Sweety Garg)

Date of Examination: (College Stamp)

Practical 1

Introduction and Contribution to Wikipedia.

a) Description about Wikipedia and its features:

Description: Wikipedia is a free, open content online encyclopedia created through the collaborative effort of a community of users known as Wikipedians. Anyone registered on the site can create an article for publication; registration is not required to edit articles. The site's name comes from wiki, a server program that enables anyone to edit Web site content through their Web browser.

Jimmy Wales amd Larry Sanger co-founded Wikipedia as an offshoot of an earlier encyclopedia project, Nupedia, in January 2001. Originally, Wikipedia was created to provide content for Nupedia. However, as the wiki site became established it soon grew beyond the scope of the earlier project. As of January 2015, the website provided well over five million articles in English and more than that number in all other languages combined. At that same time, Alexa ranked Wikipedia as the seventh-most popular site on the Internet. Wikipedia was the only non-commercial site of the top ten.

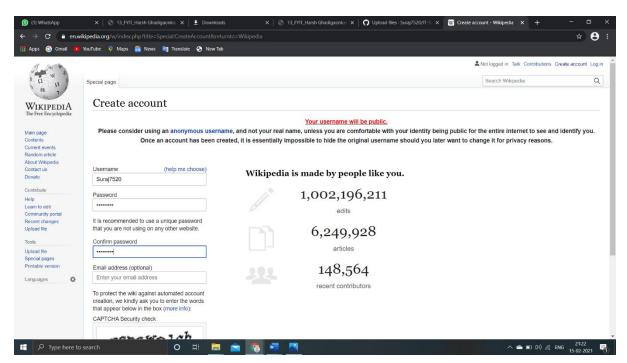
Features: 1. Creation of page, you can set your title and can add your own texts, no need of coding just type and format text like an email, when you done click on submit and its ready to view for everyone.

- 2. You can edit a public page if you find an outdated data, you can open editing screen and edit and then click on submit and changes are made.
- 3. Links can be created between pages you can simply add brackets around another Wiki page's title (e.g. [[Example Page Title]]) to automatically link to that page.
 - b) Creating account on Wikipedia.

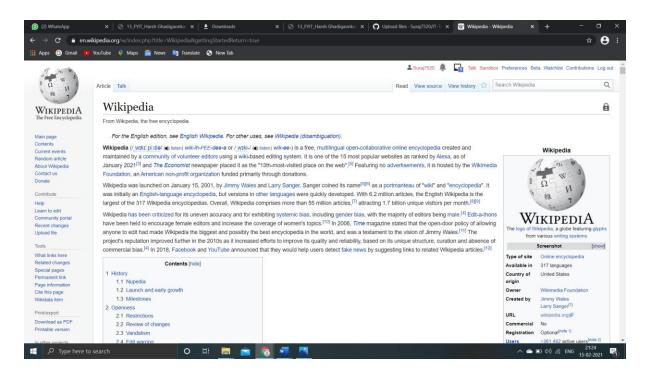
Step 1: Click on the "Create account" on the upper right corner.



Step 2: Fill in the required details and click on the "Create your account" button.

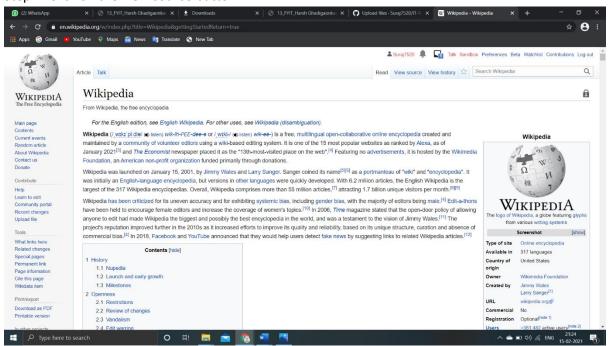


After clicking the button the account will be created.

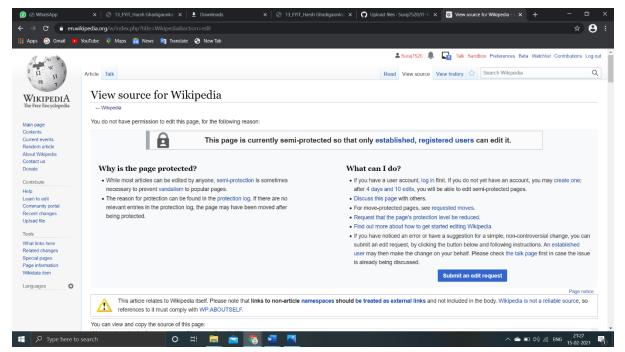


c) reating your page on Wikipedia:

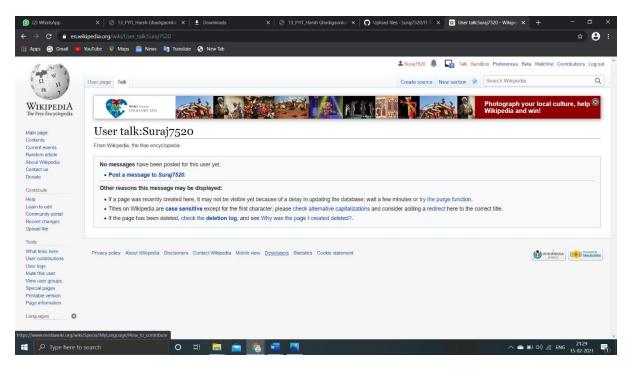
Step 1: Click on the view source button.



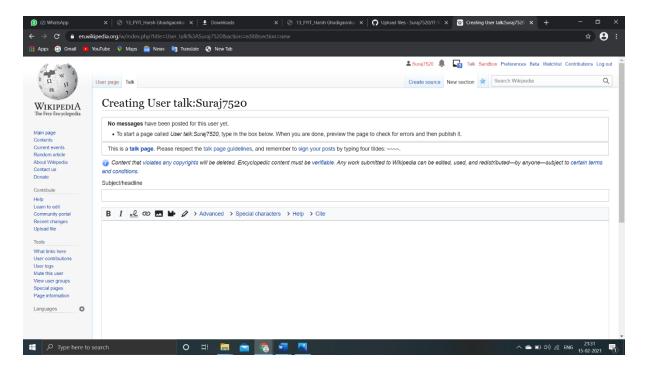
Step 2: Click on submit an edit request.



Step 3: Click on talk button.

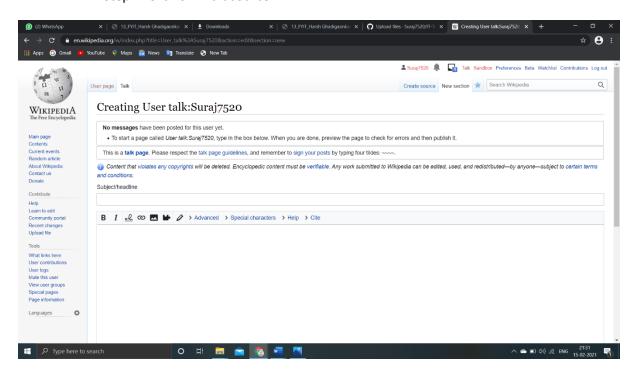


Step 4: Click on the user page.

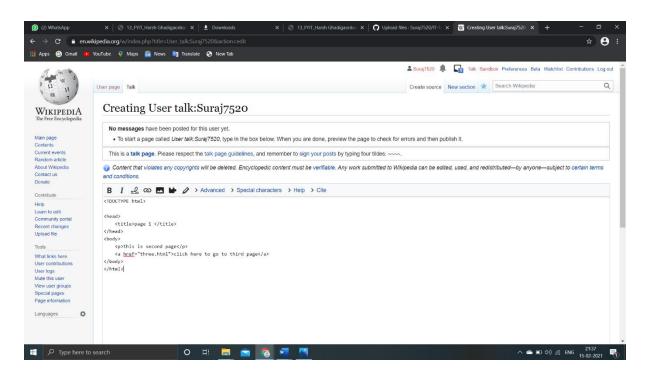


a) Editing your page on Wikipedia:

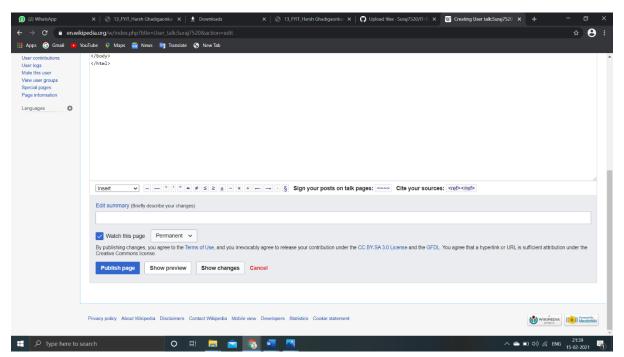
Step 1: Click on "Edit source".



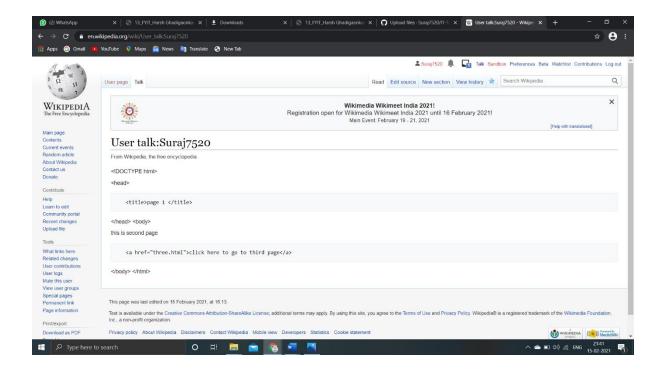
Step 2: Make the required changes.



Step3:- Click on publish page.



After clicking on publish page you will reach on this page.

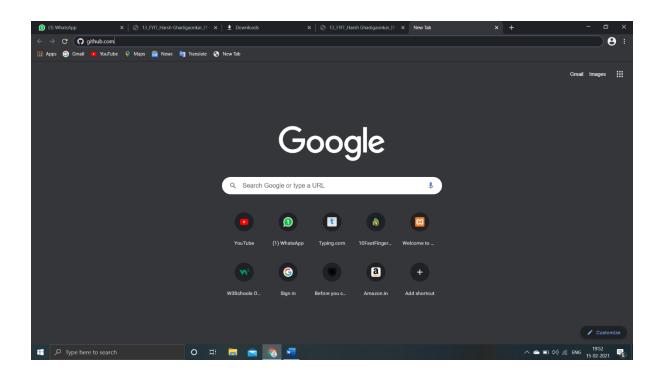


Practical 2

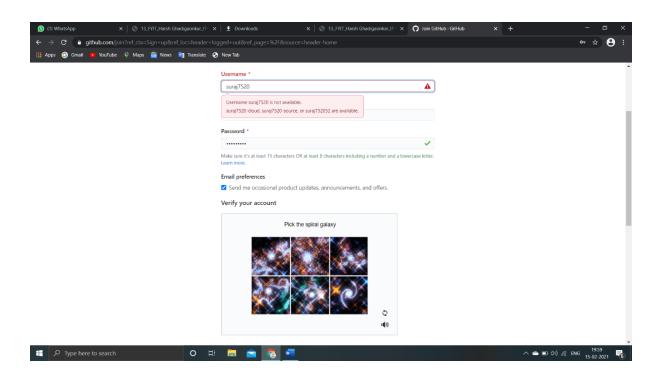
Creating account, repository on Github and Cloning repository in Github.

a) Creating Account:

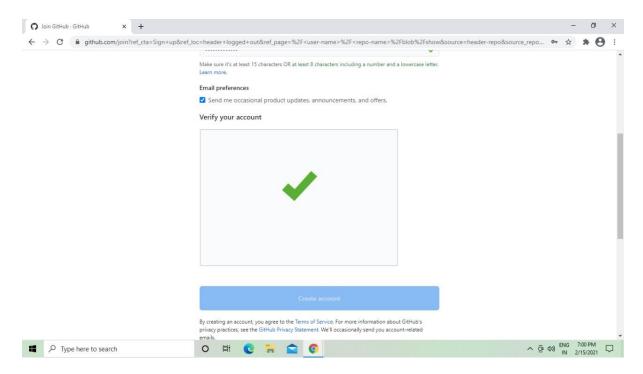
Step 1: Go to https://github.com/join in a web browser. You can use any web browser on your computer, phone or tablet to join.



Step 2: Enter your personal details and complete the CAPTCHA puzzle.

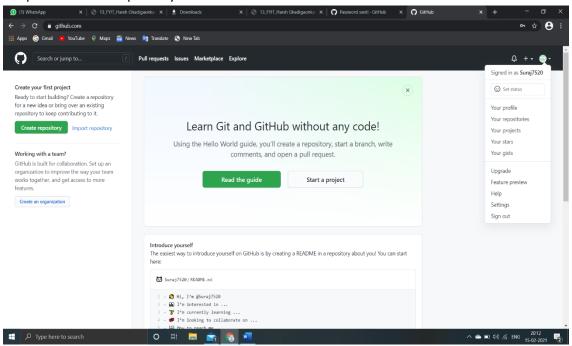


Step 3: Click the 'Create account' button below the form.

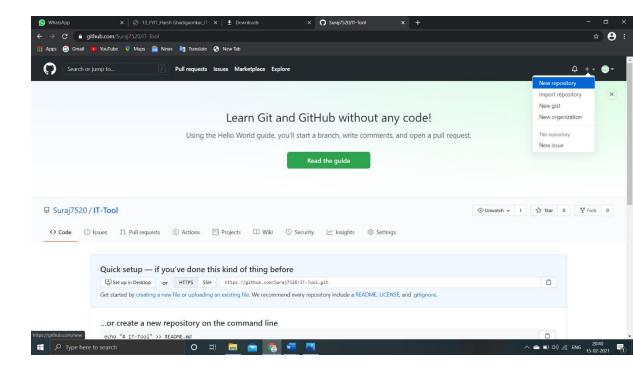


b) Creating Repository:

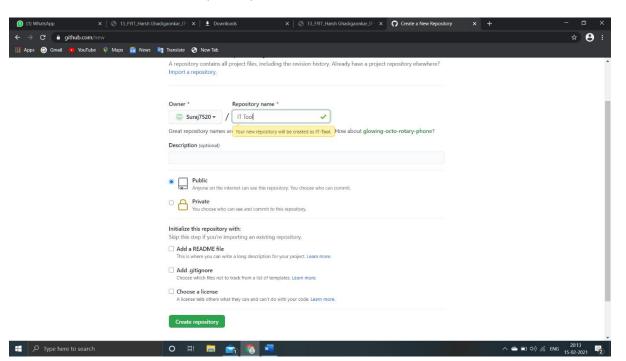
Step 1: To create repository click on + Button.



Step 2: Click on new repository.

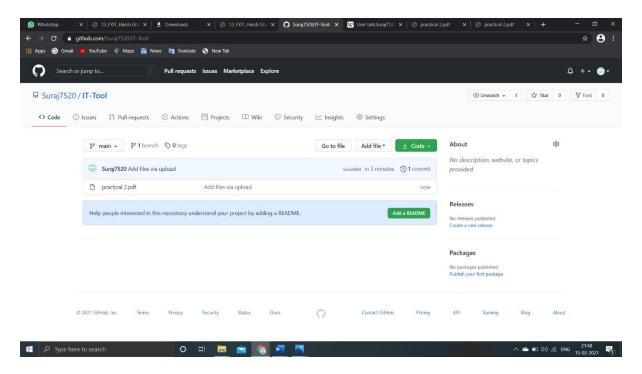


Step 3: Give name to your repository and choose one from private or public. Then click on create repository.

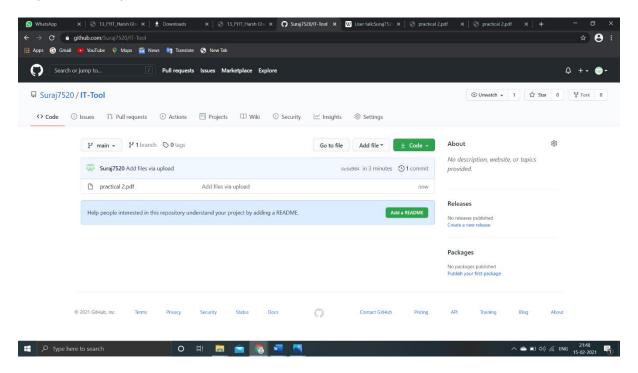


c) Cloning Repository:

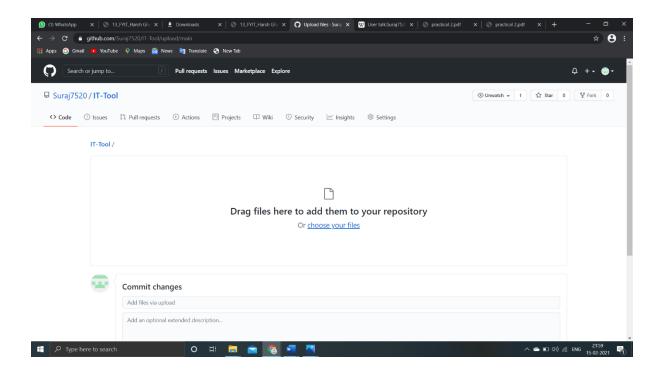
Step 1: Click on add file button.



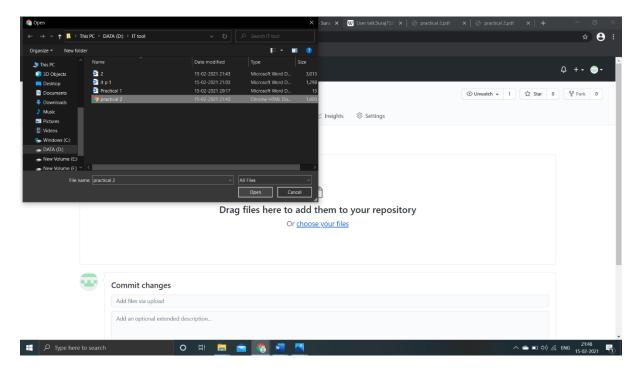
Step 2: Click on upload file button.



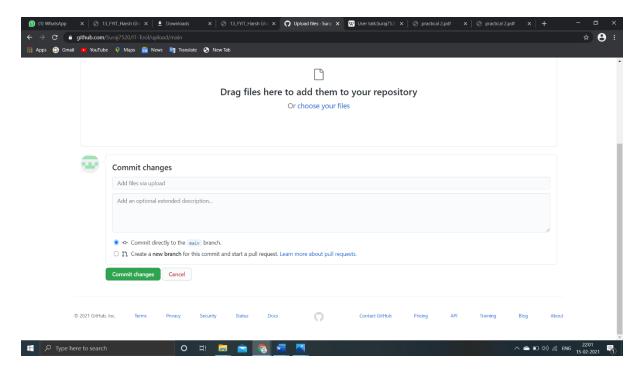
Step 3:- Click on choose your files.



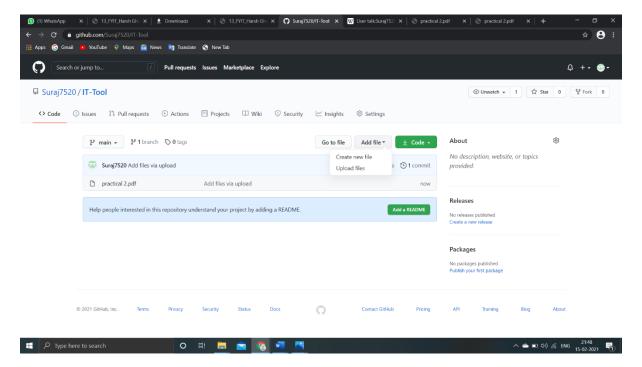
Step 4 :- Select file which you want to upload then click on open button.



Step5:- Click on commit changes button.



Step6:- Click on code button to get the link of our reposit



PRACTICAL 3

1) Describe open source software oftwith example

Ans :- Open source software is type of computer software in which source code is released under a licence in which the copyright holder grants users the rights to use,

study, change, and distribute the software to anyone and for any purpose. Open-source software may be developed in a collaborative public manner. Open-source software is a prominent example of open collaboration.

open-source software development can bring in diverse perspectives beyond those of a single company. A 2008 report by the Standish Group stated that adoption of open-source software models has resulted in savings of about \$60 billion (£48 billion) per year for consumers

types of open source software.

- Operating systems.
- Web servers.
- Database systems.
- Mobile development frameworks.
- QA automation tools.
- Big data analytics tools.
- Office software suites.
- Content management systems (CMSs)

Example:-

Firefox—a Web browser that competes with Internet Explorer. OpenOffice—a competitor to Microsoft Office. Gimp—a graphic tool with features found in Photoshop. Alfresco— collaboration software that competes with Microsoft Sharepoint and EMC's Docume advantages of open source software?

- FLEXIBILITY AND AGILITY.
- SPFFD.
- COST-EFFECTIVENESS.
- ABILITY TO START SMALL.
- SOLID INFORMATION SECURITY.
- ATTRACT BETTER TALENT.
- SHARE MAINTENANCE COSTS.
- THE FUTURE. disadvantages of open source software?
- The difficulty of use Some open source applications may be tricky to set up and use.
- Compatibility issues Many types of proprietary hardware need specialised drivers to run open source programs, which are often only available from the equipment manufacturer.

2) Describe Free software with example

Free software is **softwaare** that can be freely used, modified, and redistributed with only one restriction: any redistributed version of the software must be distributed with the original terms of free use, modification, and distribution (known as **copyleft**). The definition of free software is stipulated as part of the GNU Project and by the **free software foundation** Free software may may be packaged and distributed for a fee; the "free" refers to the ability to reuse it, modified or unmodified, as part of another software package. As part of the ability to modify, users of free software may also have access to and study the **source code**

The concept of free software is the brainchild of Richard Stallman, head of the GNU Project. The best known example of free software is **linux**, an operating system that is proposed as an alternative to Windows or other proprietary operating systems. **debian** is an example of a distributor of a Linux package

Examples of Open Source Software

- **Firefox**—a Web browser that competes with Internet Explorer.
- OpenOffice—a competitor to Microsoft Office.
- Gimp—a graphic tool with features found in Photoshop.
- Alfresco—collaboration software that competes with Microsoft Sharepoint and EMC's Documentum.

Software is a set of instructions, data or programs used to operate computers and execute specific tasks. ... **Examples** of applications include office suites, database programs, web browsers, word processors, **software** development tools, image editors and communication platforms.

Free software (or libre **software**) is computer **software** distributed under terms that allow users to run the **software** for any purpose as well as to study, change, and distribute it and any adapted versions.

Software	Examples	Program?
Internet browser	Firefox, Google Chrome, and Internet Explorer.	Yes
Movie player	VLC and Windows Media Player.	Yes
Operating system	Android, iOS, Linux, macOS, and Windows.	No

.

3) Difference between open source software and free software

Free Software: "Free software" means software that respects users' freedom and community. Roughly, it means that the users have the freedom to run, copy, distribute, study, change and improve the software.

The term "free software" is sometimes misunderstood—it has nothing to do with price. It is about freedom.

Open Source Software:

Open Source Software is something which you can modify as per your needs, share with others without any licensing violation burden. When we say Open Source, source code of software is available publicly with Open Source licenses like GNU (GPL) which allows you to edit source code and distribute it. Read these licenses and you will realize that these licenses are created to help us.

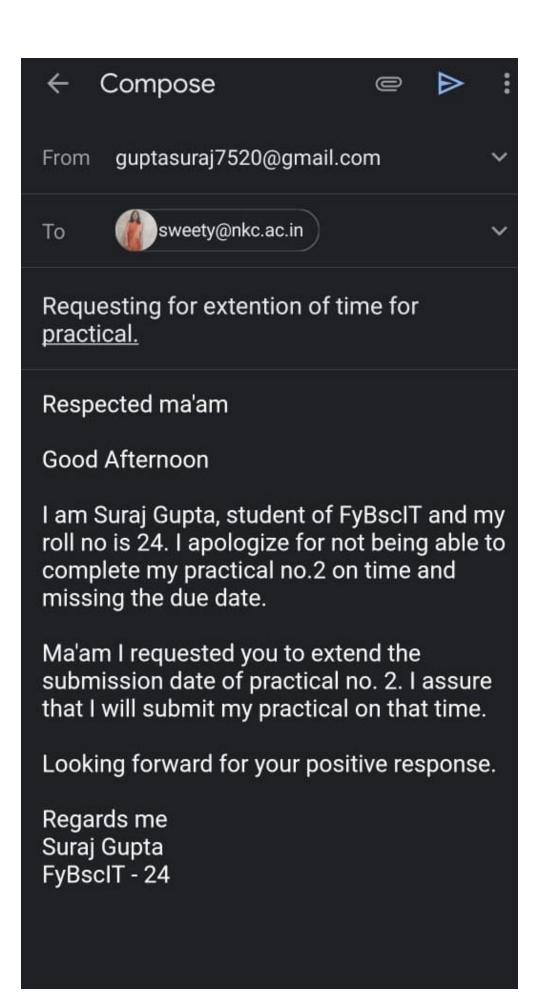
- 1. Coined by the development environments around software produced by open collaboration of software developers on the internet.
- 2. Later specified by the Open Source Initiative (OSI).
- 3. It does not explicitly state ethical values, besides those directly associated to software development.
 - Software is an important part of Software is just software. There are people's lives. no ethics associated directly to it.
 - Software freedom translates to Ethics are to be associated to the 2. social freedom. people not to the software.
 - Freedom is a value that is more Freedom is not an absolute concept. Freedom should be
 - 3. advantage. allowed, not imposed.

Examples: The Free Software Directory maintains a large

database of free-software Examples: Prime examples of openpackages. Some of the best-source products are the Apache known examples include the HTTP Server, the e-commerce Linux kernel, the BSD and Linux platform osCommerce, internet operating systems, the GNU browsers Mozilla Firefox and Compiler Collection and C library; Chromium (the project where the MySQL relational database; vast majority of development of the the Apache web server; and the freeware Google Chrome is done)

 Sendmail mail transport agent. and the full office suite LibreOffice.

PRACTICAL 4



Practical No. 5

Q) Using practical examples, describe Green computing. List and explain the steps that you take to contribute to Green computing.

GREEN COMPUTING:- Green computing is the environmentally responsible and eco-friendly use of computers and their resources. In broader terms, it is also defined as the study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact. Many IT manufacturers and vendors are continuously investing in designing energy-efficient computing devices, reducing the use of dangerous materials and encouraging the recyclability of digital devices. Green computing practices came into prominence in 1992, when the Environmental Protection Agency (EPA) launched the Energy Star program. Green computing is also known as green information technology (green IT).

Renewable energy sources don't use fossil fuel.

- 2) They are available freely, are environmentally friendly and generate less pollution.
- 3) Apple, who is building a new corporate center.is planning to use most of the building's wind turbine technology, and Google has already built a wind-powered data centre.
- 4) All IONOS facilities in the US are either sourced from renewal sources, offset through certificates, or both. The company is also mindful of sustainability when manufacturing and disposing of hardware. As a result, CO2 emissions in 2018 were reduced by 143 tons through the recycling of old hardware.

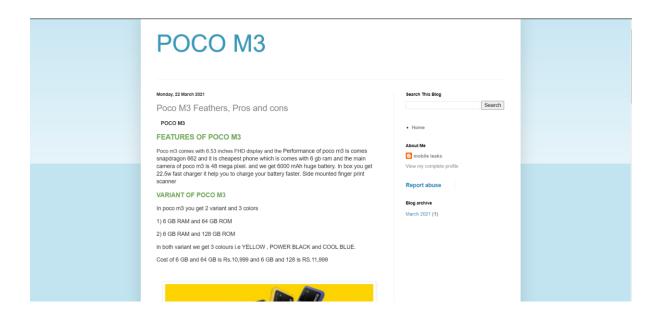
Steps that we can take to contribute to Green Computing

1. Buy "Energy Star" labeled monitors, desktops, laptops, and printers. The "Energy Star" devices can be programmed to "power-down" to a low power state when they are not in use, helping you save energy and run cooler which helps them last even longer. The Energy Star specification for computers was revised on October 20, 2006 and goes into effect July 20, 2007. The specification includes new performance requirements to qualify for the Energy Star rating for desktop and notebook computers, workstations, integrated computers, desktop-derived servers and game consoles. Now you can feel good about that upgrade!

2. Even better, turn OFF computers and other equipment when not in use. Despite the debate over whether it's better for your computer to be left on or shut off, the fact is it's better for the environment to shut it off. Trust me, your computer can handle it just fine; in fact, computers were designed to be turned off and back on!

PRACTICAL 6

BLOG





Pros of poco M3	
1. Big battery life	
2. Stereo speakers	
3. IR remote	
4. 6 GB ram at cost of 10999	
5. FHD display.	
Cons of poco M3	
Average performance with Snapdragon 662 chipset	
No ultra wide camera	
3. Plastic back	

PRACTICAL 7

1) Implementing coding practice in python using PEP8.

<u>PEP 8 :-</u> Indeed coding and applying logic is the foundation of any programming language but there's also another factor that every coder must keep in mind while coding and that is the coding style. Keeping this in mind, Python maintains a strict way of order and format of scripting. Following this sometimes mandatory and is a great help on the user's end, to understand. Making it easy for others to read code is always a good idea, and adopting a nice coding style helps tremendously for that.

For Python, PEP 8 has emerged as the style guide that most projects adhere to; it promotes a very readable and eye-pleasing coding style.

<u>1)Use docstrings</u>: There are both single and multi-line doctrines that can be used in Python. However, the single line comment fits in one-line, triple quotes are used in both cases. These are used to define a particular program or define a particular function.

<u>2)Use of regular and updated comments are valuable to both the coders and user</u>:-There are also various types and conditions that if followed can be of great help from programs and users point of view. Comments should form complete sentences. If a comment is a full sentence, its first word should be capitalized, unless it is an identifier that begins with a lower-case letter. In short comments, the period at the end can be omitted.

<u>3)Naming convention: -</u> There are few naming conventions that should be followed in order to make the program less complex and more readable. At the same time, the naming conventions in Python is a bit of mess, but here are few conventions that can be followed easily.

There is an overriding principle that follows that the names that are visible to the user as public parts of API should follow conventions that reflect usage rather than implementation.

Example:

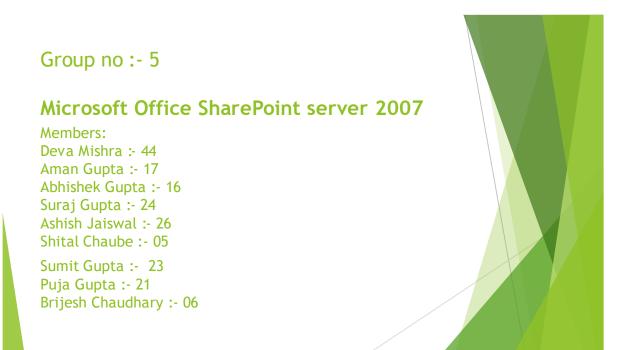
```
Code:-

color = ['orange','white','brown','grey']
print(color)
print(type(color))
print(len(color))
print(color[1])
print(color[-2])

Output:-

['orange', 'white', 'brown', 'grey']
<class 'list'>
4
white
brown
>>> |
```

PRACTICAL:-8



What is Microsoft Office 2007?

Microsoft Office 2007 is a version of Microsoft office, a family of office suites and productivity software for windows, developed and published by Microsoft.





Introduction to Microsoft Office SharePoint Server 2007

Microsoft Office SharePoint server or (MOSS) is Microsoft's first integrated server platform that aims to provide web content management, enterprise content services, and enterprise search.

MOSS 2007 is an application which runs on the WSS 3.0 platform.



Introduction to Microsoft Office SharePoint Server 2007

- SharePoint is a massive website engine which helps you create your own web site.
- It is not necessary to be a web designer for creating a website, any SharePoint user can create their own sites which can be a personal site or a website for their team or a website for their company as well as world.
- ▶ MOSS 2007 is enterprise collaboration and portal application which sits on top of WSS 3.0 framework and extends WSS 3.0 features as well as provides several new features which are not available in core WSS 3.0.
- It is used by Organizations to create websites .
- It can be use as a secure place to store, organise, share, and access information from any device.

General Improvements:-

- 1) Navigation:- Navigation can make or break your website's overall performance when it comes to retaining visitors, keeping them engaged and driving them through the conversion funnel.
- 2) Breadcrumd:- A breadcrumb trail is a small menu usually located at the top of a page, used as a navigational aid. It shows the path to go from the current page back to the homepage.



General Improvements:-

- ▶ 3) Improved views : Many professionals have areas of improvement that could affect the way they work. Knowing what you can enhance can help you develop a plan of action to work on addressing your weaknesses, which can help you become a better employee.
- 4) Item level security: Here is a real-life scenario. You have built a list in SharePoint so that users can submit entries, but you only want users to be able to read or modify own entries.
- <u>5) Security trimmed ui:-</u> The assembly Microsoft.SharePoint.WebControls contains a control named SPSecurityTrimmedControl that does the security trimming of the child controls inside it. Just include our control inside this control and it will be displayed or hidden based on the permission specified.
- ▶ <u>6) RSS:-</u> The RSS chief's statement saw the civil aviation ministry swing into damage control mode. The ministry has assiduously worked over the past 10 months to offload its majority stake in the airline, but has struggled to find buyers.

Content Management

Bootstrap-- Architecture Basics:

To really get the most out of SharePoint you need to understand several important design and architecture concepts, and plan your implementation with a few key points in mind.



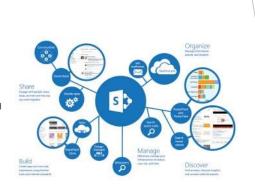
Content Management

- Second Things Next -- User Experience and IA:- Don't ask SharePoint to help you with your User Experience or Information Architecture. MOSS is a .NET development platform which provides a set of content, collaboration, search and integration services.
- Look and Feel -- Branding & Navigation:- If you listen to all the gossip on the net you may have heard that modifying the branding of a SharePoint site is one of the most challenging aspects of building on SharePoint.
- <u>Creating Multi-Lingual Websites:-</u> SharePoint is able to create and deploy websites that are multi-lingual. SharePoint has a feature called Variations that can be used to deploy content in one or more languages.
- <u>Publishing & Deployment:-</u> Setting up a SharePoint site requires setting up several site infrastructures -- generally development, staging and production.
- Wrap Up -- Time to Get Dirty:- That's the basics of web content management in SharePoint 2007. Us per the usual story, the best way to really understand the technology is to get your hands dirty with it.

Benefits

<u>Provides</u>:- Microsoft Office SharePoint Server 2007 provides a simple, familiar, and consistent user experience tightly integrated with familiar desktop applications, e-mails, and Web browsers.

<u>Boost Productivity:</u> Microsoft Office SharePoint Server 2007 boosts productivity by simplifying everyday business activities through out-of-the-box workflows.



Benefits

- ► <u>Connect People</u>: Office SharePoint Server connects people with information and expertise through a powerful and relevant search.
- ▶ <u>Business-Critical:</u> Microsoft SharePoint Server 2007 enables people to make better-informed decisions by presenting businesscritical information in one central location.
- ▶ <u>Sharing Business data</u>: Microsoft Office SharePoint Server 2007 allows sharing business data without divulging sensitive information through real time, interactive Excel spreadsheets using Excel Services.
- ▶ <u>organize access</u>: Microsoft Office SharePoint Server 2007 simplifies organizationwide access to both structured and unstructured information across disparate systems including Enterprise Resource Planning and CRM applications.

CRITICISM OF MICROSOFT OFFICE SHAREPOINT SERVER 2007

Bibliographies:- The new word 2007 features for bibliographies only support a small number of fixed citation style. Using XSLT, new styles can be added. The standard Association for computing Machinery publication format, are made freely available by third parties.



CRITICISM OF MICROSOFT OFFICE SHAREPOINT SERVER 2007

- Office open XML:- The new XML-based document file format in Microsoft Office 2007 is incompatible with previous version Microsoft Office unless an add on is installed for the older version. The Microsoft Word 2007 file format usability for does not support open XML format.
- <u>Ribbons:-</u>Even though the ribbon can be hidden PC World wrote that the new ribbon interface crowds the Office work area, especially for notebook users. PC World has stated that upgrading to Office 2007 presents dangers to certain data, such as templates, macros, and mail messages.
- > The ribbon cannot be moved from the top to the side of the page.
- Patenting controversy:- Microsoft contractor Mike Gunderloy left Microsoft partially over his disagreement With the company's. He says that by leaving Microsoft , he is "no longer contributing death of programing".

Six Pillars of Microsoft SharePoint Server 2007

1.Collaboration: - By integrating Workspaces, Tasks, Forums, Surveys, Blogs, RSS and Wikis, the platform builds on the wild success of the 2003 collaboration features while hitting the Web 2.0 check box items for the new wave of collaboration and knowledge management applications.



Six Pillars of Microsoft SharePoint Server 2007

- <u>2 Portal</u>: SharePoint is a portal framework built using multiple portlets known as web parts. It offers Master pages which can be used for maintaining consistency across the portal.
- This remains one of the primary differentiators between the pay per CAL SharePoint version and the free WSS offering.
- 3. Enterprise Search: The core problems have been addressed and the functionality broadly expanded.
- MOSS 2007 opens up ACL-aware search across both local and remote data stores with features that enable specialized search for people and expertise.
- ▶ The ability to index and search data in line -of-business apps via the Business Data Store integration is powerful and will please both business managers and developers alike.

Six Pillers of Microsoft SharePoint Server 2007

- ▶ 4.web & enterprise content management: rolMicrosoft is including core document management, major and minor versioning, check-in/check-out document locking, rich descriptive metadata, workflow (via windows workflow foundation), content type-based policies, auditing, and e-based access controls at the document library ,folder, and individual document levels.
- The 2007 release builds on these capabilities delivering enhanced authoring, business document processing, web content management and publishing, records management.
- ▶ <u>5. Business process:</u> Microsoft has overhauled this aspect of sharepoint with XML driven infopath forms that are available on a variety of platforms including portable wireless devices .

Six Pillers of Microsoft SharePoint Server 2007

- ▶ Client/server based form maintenance has been centralized and improved for business, processes for partner and customers .this area is not as close to our hears, but is another dynamic one that captures attention.
- ▶ <u>6. Business Intelligence</u>: finally, BI has been improved across the board with Web-based dashboards on the macro level, server-based Excel services and Excel web services API's, line of business application and data repository application and data repository integration, and more sophisticated abilities to monitor key performance indicators.

Development of MOSS

Office 2007 introduced a new graphical user interface called the Fluent User Interface, which uses ribbons and an Office menu instead of menu bars and toolbars. Office 2007 also introduced Office Open XML file formats as the default file formats in Excel, PowerPoint, and Word. The new formats are intended to facilitate the sharing of information between programs, improve security, reduce the size of documents, and enable new recovery scenarios

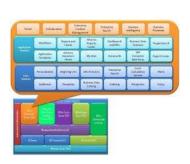


Development of MOSS

- ▶ Office 2007 requires Windows XP with Service Pack 2, Windows Server 2003 with Service Pack 1, or a later version of Windows it is the last version of Microsoft Office to run on Windows XP Professional x64 Edition, as well as the x64 editions of Windows Server 2003
- Microsoft FrontPage discontinued, Microsoft SharePoint Designer, which is aimed towards development of SharePoint portals, becomes part of the Office 2007 family. Its designer-oriented counterpart, Microsoft Expression Web, is targeted for general web development. However, neither application has been included in Office 2007 software suites.
- ▶ Speech recognition functionality has been removed from the individual programs in the Office 2007 suite, as Windows Speech Recognition was integrated into Windows Vista. Windows XP users must install a previous version of Office to use speech recognition features.

Features of MOSS

1. User interface (UI); The entire user interface has been redesigned to make navigation and achieving simple tasks easy.



Features of MOSS

- 2. Drag and drop: Upload content to sites by dragging items from your computer into a library.
- 3. On-hover:— A callout feature that works with any document within a library or from search results that enables easy sharing, viewing, following or jumping to content
- ▶ <u>4.Touch:</u> Large touch targets for easy navigation and mobile device access.
- ▶ <u>5. Business Intelligence</u>: finally, BI has been improved across the board with Web-based dashboards on the macro level, server-based Excel services and Excel web services API's, line of business application and data repository application and data repository integration, and more sophisticated abilities to monitor key performance indicators.
- ▶ Despite Microsoft's performance point BI server, this is one area of MOSS that we feel has the ability to shift the market.

Thank you