

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: 51 Programme: BSc IT/CS **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/CS 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)

Sr. No.	DATE	TITLE	SIGN
1.	02/02/2021	INTRODUCTION and CONTRIBUTING TO WIKIPEDIA a) What is Wikipedia? b) Steps to Create Account on Wikipedia c) Creating Page on Wikipedia d) Edit your page	
2.	09/02/2021	Creating account, repository on GitHub and Cloning repository in GitHub Page	
3.	16/02/2021	BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE a) Describe Open-Source Software with Example. b) Describe Free Software with Example c) Difference between Free and Open-Source Software.	
4.	23/02/2021	WRITING EMAIL	
5.	25/02/2021	Using practical examples, describe green computing. List and explain the steps that you take to contribute to green computing	
6.	02/03/2021	WRITING BLOGS	
7.	09/03/2021	Implementing coding practices in Python using PEP8.	
8.	16/02/2021	PRESENTATION: Open Source Software	

Practical1: Introduction and Contribution to Wikipedia

Description about Wikipedia:

Wikipedia, free Internet-based encyclopaedia, started in 2001, that operates under an open-source management style. It is overseen by the non-profit Wikimedia Foundation. Wikipedia uses a collaborative software known as wiki that facilitates the creation and development of articles.

Features:

You may not have realized, but you've probably already used a Wiki. The most famous example most people have engaged with is Wikipedia, the free internet encyclopaedia that anyone can edit. While your company Wiki may not end up containing quite as many answers, the concept and functionality is the same.

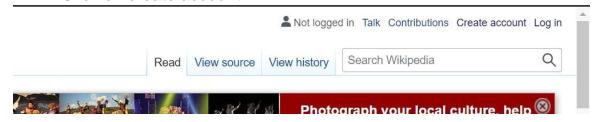
Wikis can have a variety of uses and applications, but they usually share a few key functionalities. We'll walk you through each of these features using the Wiki in Backlog.

Creating Account on Wikipedia:

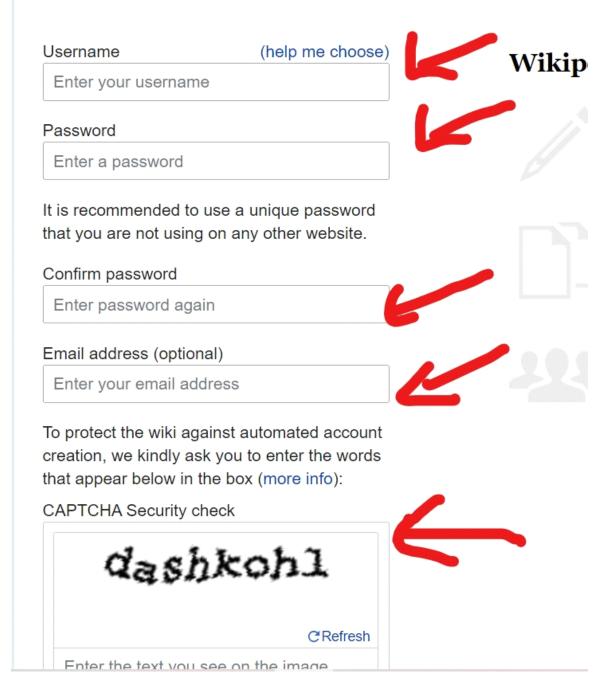
- Go to ==> https://www.wikipedia.org/"
- The click on the english as shown



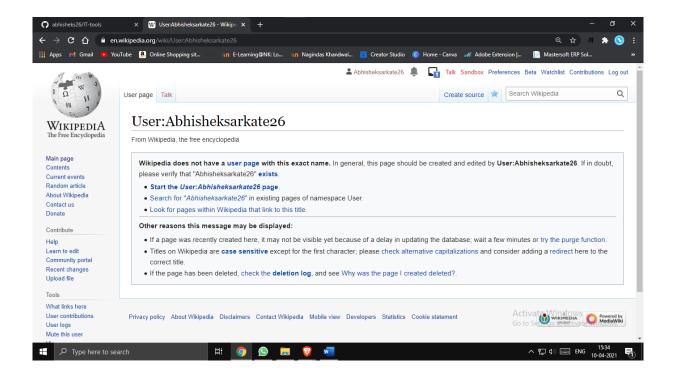
• Click on create account



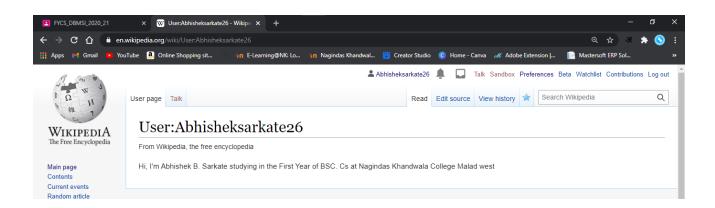
• Fill all the detail as shown in the photo



Click on the account name and then click on the start user



Editing your page on Wikipedia

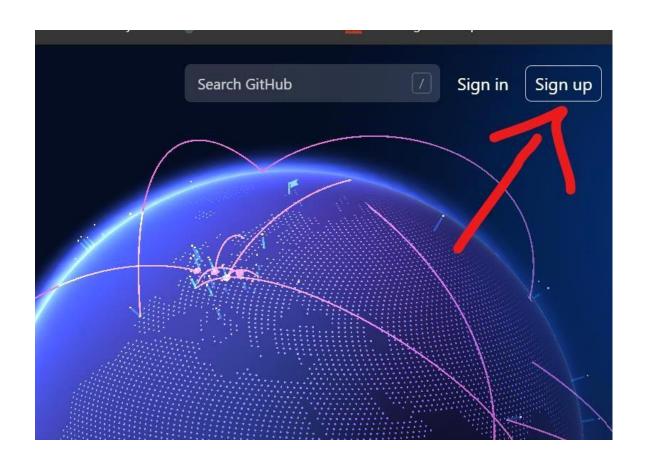


Practical2: Creating account, repository on Github and Cloning repository in Github

a) Creating Account

Go to https://github.com/ HYPERLINK "https://github.com/"

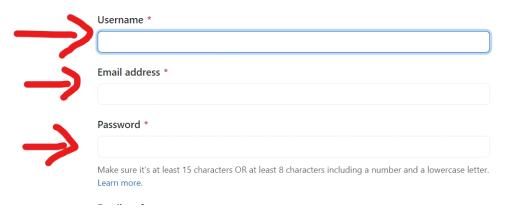
Then click on Sign up



b)Fill up your detail ::-

Username, Password, and Email:

CIOACO JOAI ACCOMITA

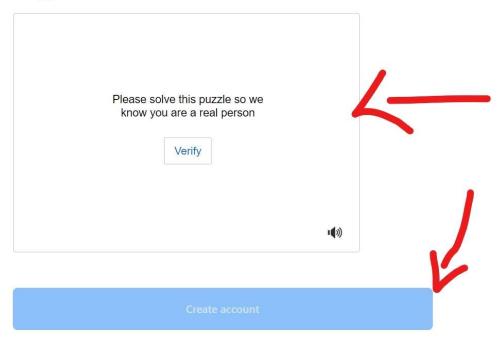


Then verify the your email and click create account:

Email preferences

☑ Send me occasional product updates, announcements, and offers.

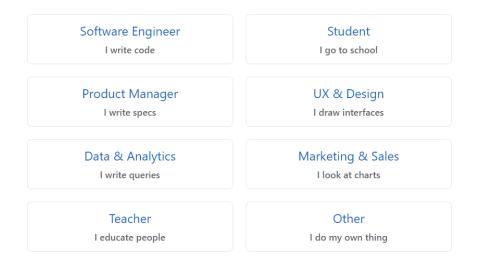
Verify your account



By creating an account, you agree to the Terms of Service. For more information about GitHub's privacy practices, see the GitHub Privacy Statement. We'll occasionally send you account-related

· Select the occupation

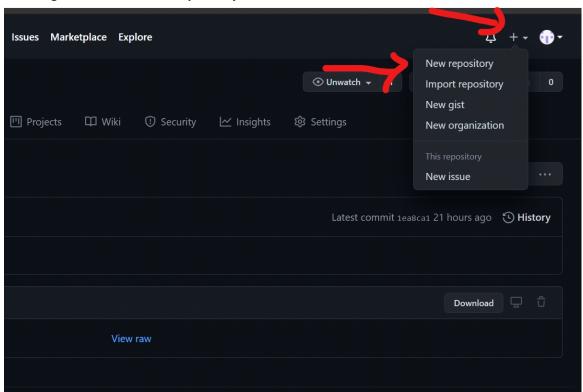
What kind of work do you do, mainly?



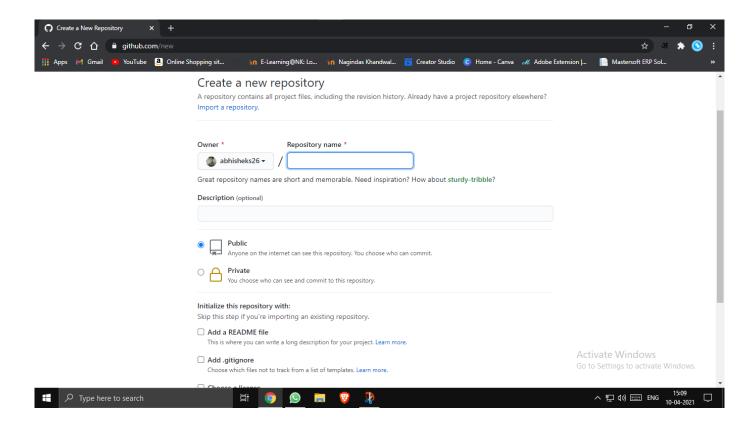
b)

Creating Repository:

Click on + sign and click on New repository

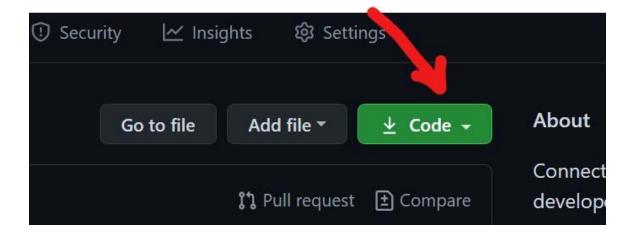


Give Name to your repository and do the setting as per requried

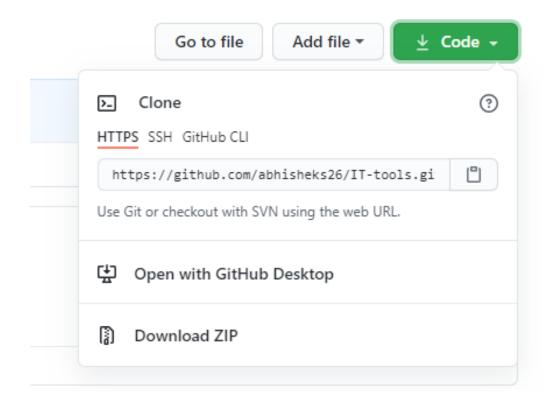


c) Cloning repository:

Click on Code in green highlight as shown in screen shot:



You can clone it with three steps as HTTPS or SSH or GitHub CLI:



PRACTICAL 3:

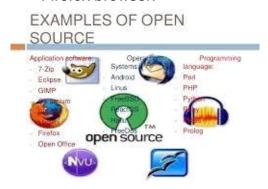
BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

a) Describe Open-Source Software with Example.

- The term <u>open source</u> HYPERLINK "https://opensource.com/article/18/2/coining-term-open-source-software" refers to something people can modify and share because its design is publicly accessible.
- Open-source software is software with source code that anyone can inspect, modify, and enhance.
- "Source code" is the part of software that most computer users don't ever see;
 it's the code computer programmers can manipulate to change how a piece of
 software a "program" or "application" works. Programmers who have access
 to a computer program's source code can improve that program by adding
 features to it or fixing parts that don't always work correctly.

Example:

- Linux operating system.
- Android by Google.
- · Open office.
- Firefox browser.



Describe Free Software with Example:

Free Softwar is <u>computer software</u> HYPERLINK "https://en.wikipedia.org/wiki/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. Free software is a matter of <u>liberty</u> HYPERLINK "https://en.wikipedia.org/wiki/Liberty", not price: all users are legally free to do what they want with their copies of a free software (including profiting from them) regardless of how much is paid to obtain the program.

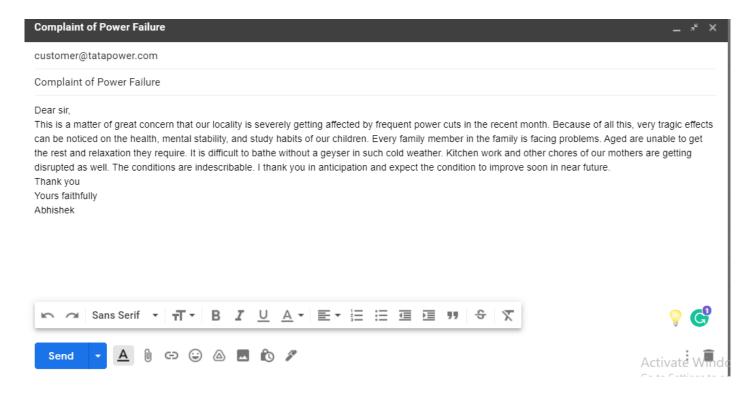
Difference between Free and Open Source Software: Free software

Open source software

- Software freedom translates to social freedom.
- Software is an important part of people's lives.
- Freedom is a value that is more important than any economical advantage.
- Examples: The Free Software Directory maintains a large database of freesoftware packages. Some of the best-known examples include the Linux kernel, the BSD and Linux operating systems,
- Ethics are to be associated to the people not to the software.
- Software is just software. There are no ethics associated directly to it.
- Freedom is not an absolute concept. Freedom should be allowed, not imposed.
- Examples: Prime examples of open-source products are the Apache HTTP Server, the ecommerce platform osCommerce,

IT Practical 4

Writing Mail



Practical 5:

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

Put laptops in "sleep" mode when not in use ::-

This reduces their energy use by 60 to 70 percent – and ultimately could save enough electricity each year to power Vermont, New Hampshire, and Maine, cut electric bills by \$2 billion, and reduce carbon dioxide emissions by the equivalent of 5 million cars.

• Even better, turn OFF computers and other equipment when not in use ::-

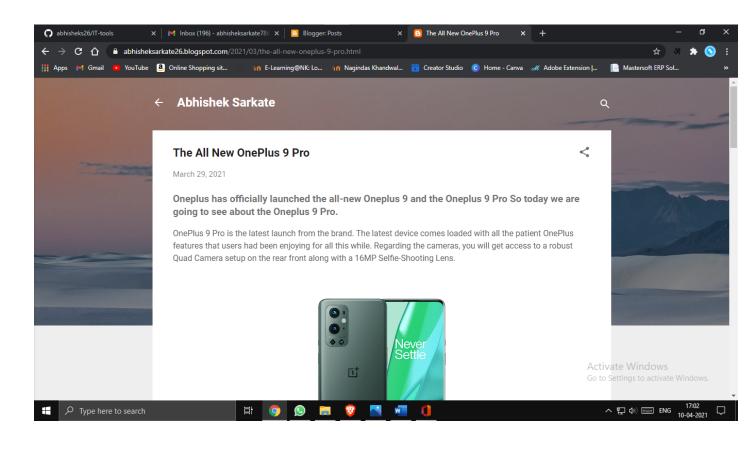
Despite the debate over whether it's better for your computer to be left on or shut off, the fact is it's better for the environment to shut it off. In fact, computers were designed to be turned off and back on!

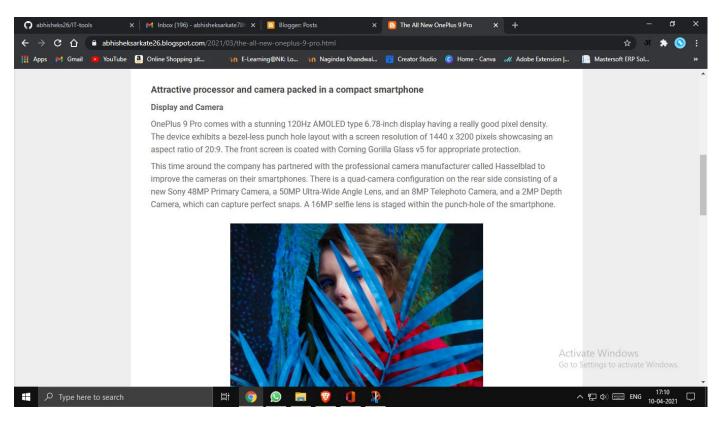
• E-cycle used computer equipment::-

Find a recycler in your area. Also, Staples, the office supply retailer, has now started a recycling program. They will accept any brands of used desktop and notebook computers, monitors, printers, fax machines and all-in-one devices. Smaller items like keyboards, mice and speakers are free to drop off.

Practical 6

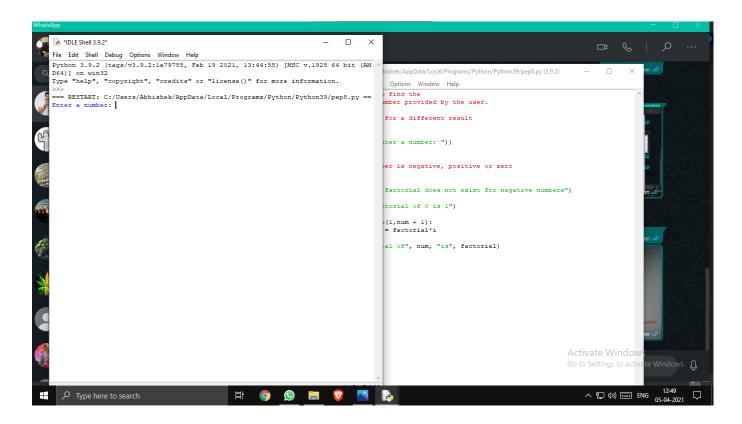
WRITING BLOGS





Practical 7

Implementing coding practices in Python using PEP8



```
🔒 pep8.py - C:/Users/Abhishek/AppData/Local/Programs/Python/Python39/pep8.py (3.9.2)
File Edit Format Run Options Window Help
#python program to find the
#factorial of a number provided by the user.
#change the value for a different result
num = 7
num =int(input("Enter a number: "))
factorial = 1
#check if the number is negative, positive or zero
if num < 0:
   print("sorry, factorial does not exist for negative numbers")
elif num == 0:
   print("the factorial of 0 is 1")
else:
    for i in range(1, num + 1):
        factorial = factorial*i
print("the factorial of", num, "is", factorial)
```



GROUP NO. 5

TANISH MARICK - 28

MARYLOU PEREIRA - 42

SATISH SAHANI - 71

DARREN PEREIRA - 41

VEDANT PHANASGAONKAR - 43

ABHISHEK SARKATE - 51

SANIYA SHAIKH - 56





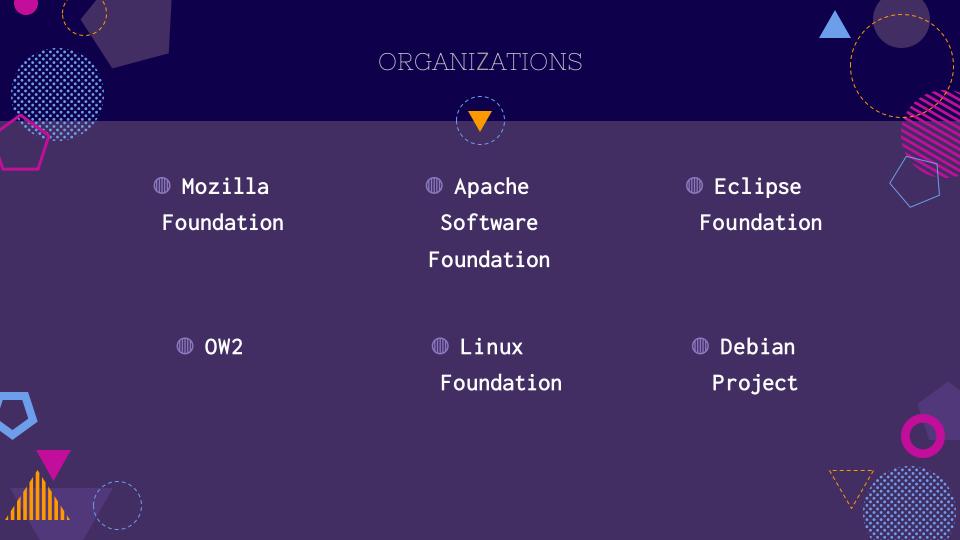




- Source code can be repurposed into other new software
- The LAMP











ADVANTAGES AND DISADVANTAGES



ADVANTAGES

- Highly reliable
- Promotes innovation
- Evolving continuously
- Fosters learning

DISADVANTAGES

- Non-user friendly
- Less personalized support
- Liabilities and warranties
- Security threats



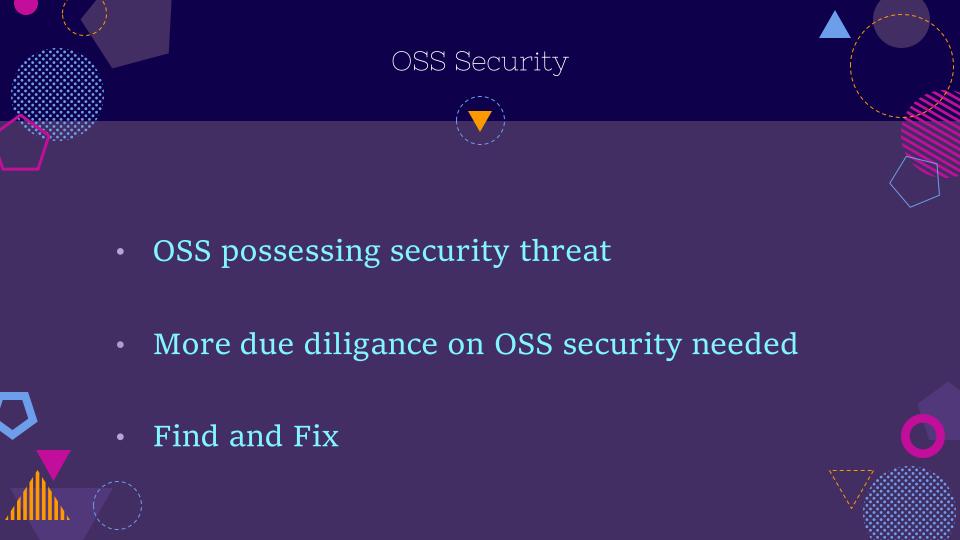




Differences Between Open Source and Closed Source Software



- □Price policy
- □Security
- □Quality of support
 - ☐Source code availability
- □Usability





Synopsis Offerings for OSS Security



 Open Source Software and thirdparty code audit









