



**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

Name: Mr./Ms. Yash pandey

Roll No: 38

Programme: BSc 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)

Name: Yash pandey

Roll No: 38

| Sr. No. | DATE | TITLE | SIGN |
|---------|---------|---|------|
| 1. | 28/1/21 | Study of Data Definition Language Statement | |
| 2. | 4/2/21 | Study of Data Manipulation Language Statement | |
| 3. | 12/2/21 | Study of SELECT Statement. | |
| 4. | 18/2/21 | Draw ER diagram for given scenario/project/case study | |
| 5. | 4/3/21 | Study of various type of JOINS | |
| 6. | 18/3/21 | Study of different functions | |
| 7. | 18/3/21 | Study of various types of SET OPERATORS | |
| 8. | 25/3/21 | Study of various types of views | |
| 9. | 25/3/21 | Study of subqueries with all its clauses | |
| 10. | 8/4/21 | Study of Transaction (Commit/ Rollback), Locks | |
| 11. | 8/4/21 | Implementing deadlocks | |

Practical 1

a) What is Wikipedia?

Wikipedia is a free, multilingual open-collaborative online encyclopedia created and maintained by a community of volunteer editors using a wiki-based editing system. It is one of the 15 most popular websites as ranked by Alexa, as of January 2021 and The Economist newspaper placed it as the "13th-most-visited place on the web". Featuring no advertisements, it is hosted by the Wikimedia Foundation, an American non-profit organization funded primarily through donations.

Wikipedia was launched on January 15, 2001, by Jimmy Wales and Larry Sanger. Sanger coined its name as a portmanteau of "wiki" and "encyclopedia". It was initially an English-language encyclopedia, but versions in other languages were quickly developed. With 6.2 million articles, the English Wikipedia is the largest of the 317 Wikipedia encyclopedias. Overall, Wikipedia comprises more than 55 million articles, attracting 1.7 billion unique visitors per month.

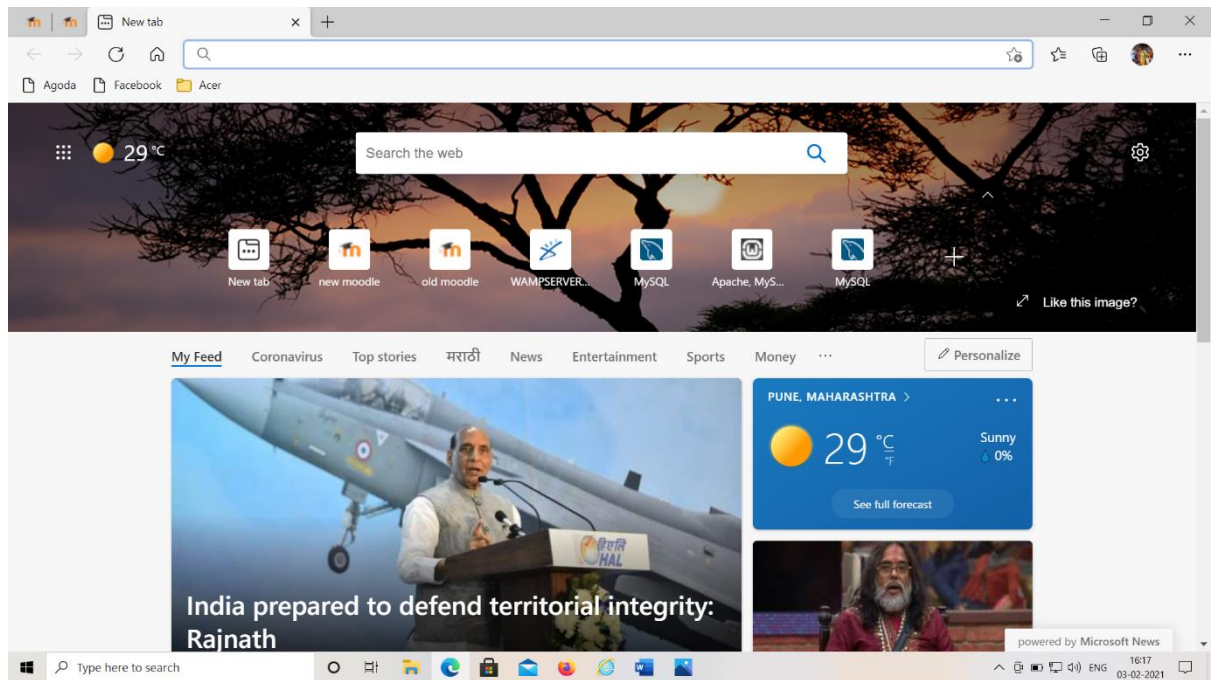
Wikipedia has been criticized for its uneven accuracy and for exhibiting systemic bias, including gender bias, with the majority of editors being male. Edit-a-thons have been held to encourage female editors and increase the coverage of women's topics. In 2006, Time magazine stated that the open-door policy of allowing anyone to edit had made Wikipedia the biggest and possibly the best encyclopedia in the world, and was a testament to the vision of Jimmy Wales. The project's reputation improved further in the 2010s as it increased efforts to improve its quality and reliability, based on its unique structure, curation and absence of commercial bias. In 2018, Facebook and YouTube announced that they would help users detect fake news by suggesting links to related Wikipedia articles.

Advantages of Wikipedia:

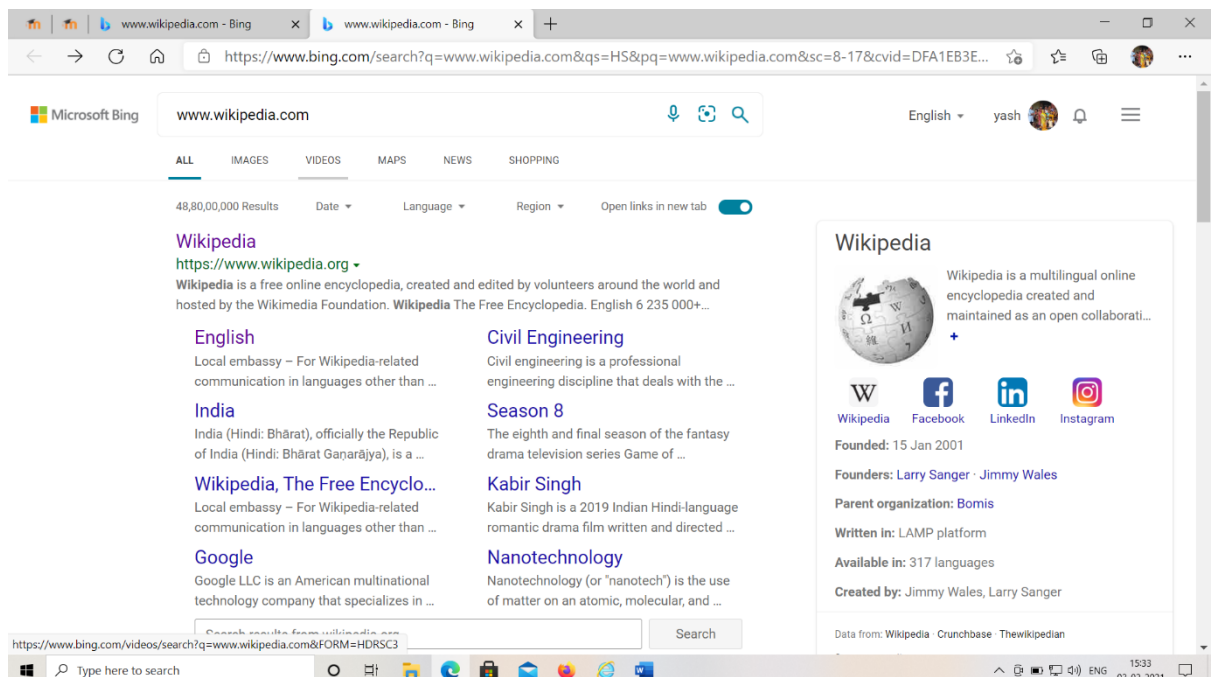
- Anyone can edit
- Easy to use and learn
- Wikis are instantaneous so there is no need to wait for a publisher to create a new edition or update information
- People located in different parts of the world can work on the same document
- The wiki software keeps track of every edit made and it's a simple process to revert back to a previous version of an article

a) Steps to Create Account on Wikipedia.

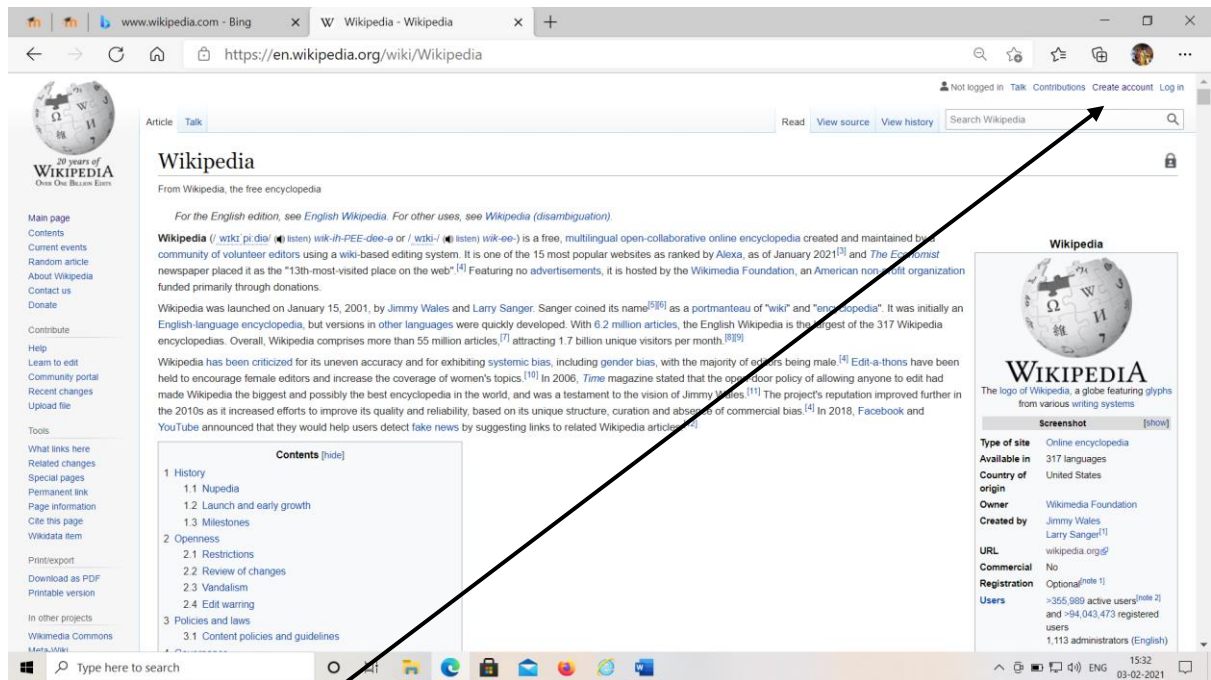
Open any browser on your device:



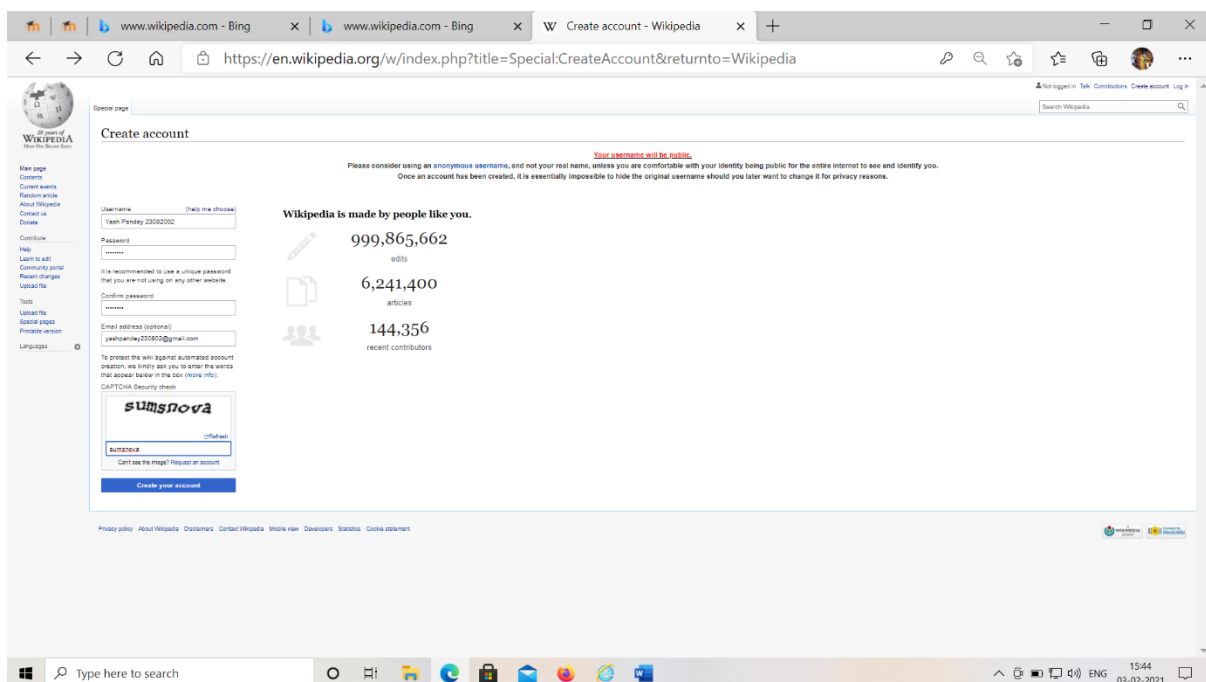
Search for www.wikipedia.com



Click the first result :

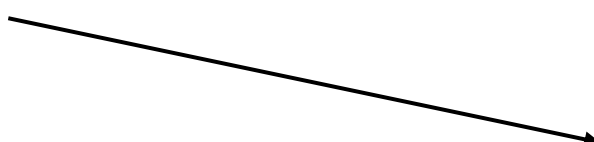


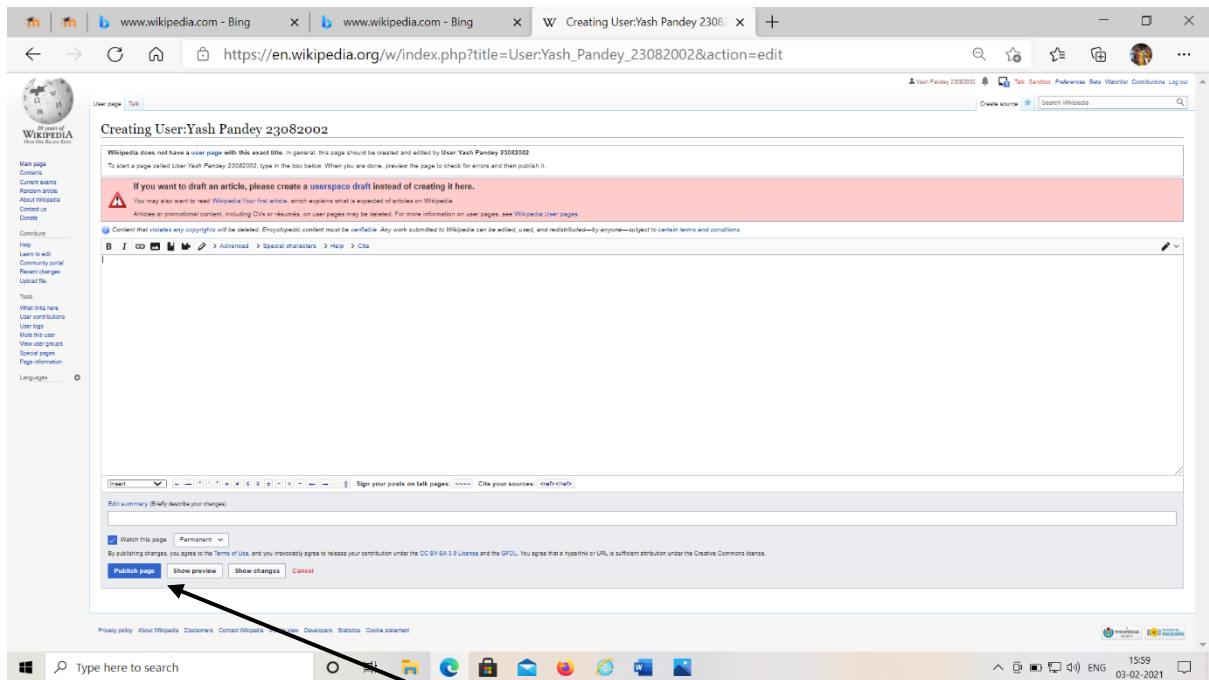
Click to create your account



b) Creating Page on Wikipedia

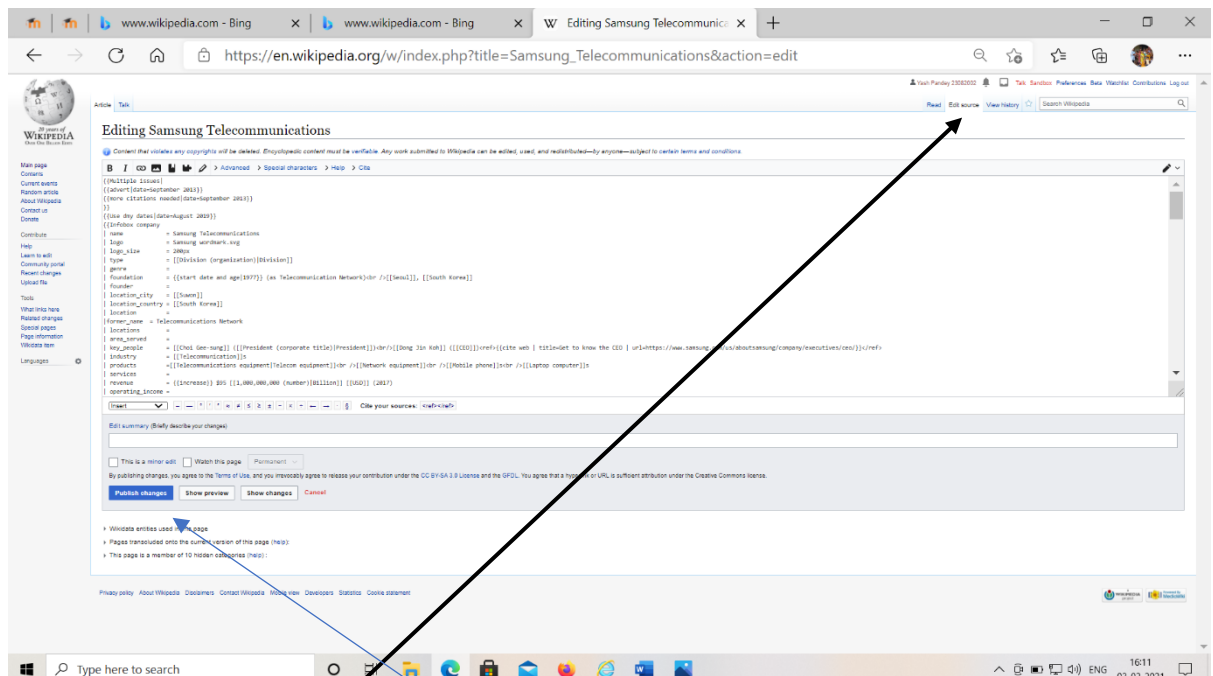
Click on the Create Source





After Writing content, Click on publish page to publish your content

c) Editing content on Wikipedia



Click on the view source

After editing the content click on the publish page

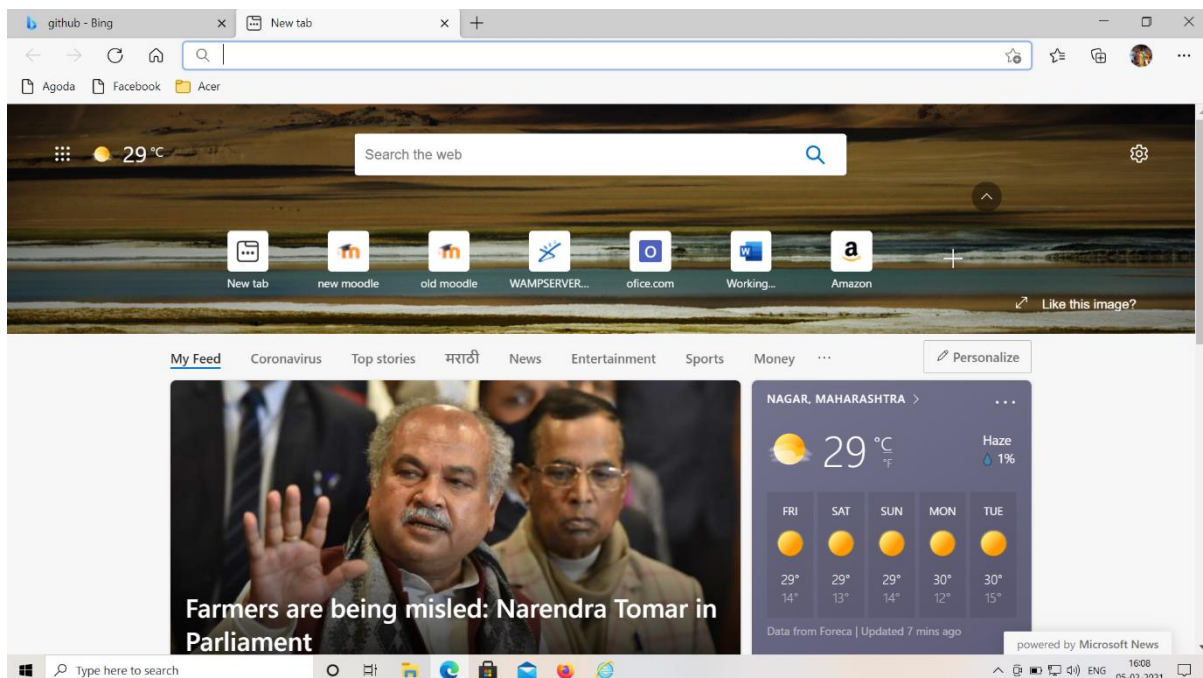
1) What is GitHub?

GitHub, Inc. is a provider of Internet hosting for software development and version control using Git. It offers the distributed version control and source code management (SCM) functionality of Git, plus its own features. It provides access control and several collaboration features such as bug tracking, feature requests, task management, continuous integration and wikis for every project. Headquartered in California, it has been a subsidiary of Microsoft since 2018.

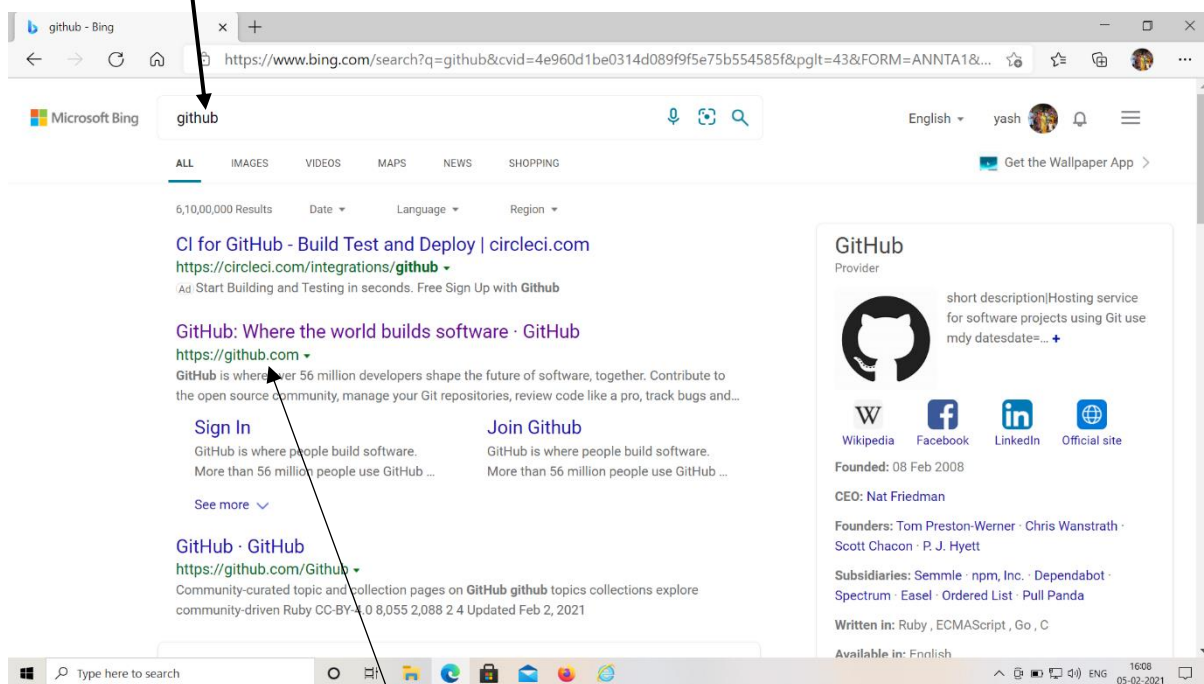
GitHub offers its basic services free of charge. Its more advanced professional and enterprise services are commercial. Free GitHub accounts are commonly used to host open-source projects. As of January 2019, GitHub offers unlimited private repositories to all plans, including free accounts, but allowed only up to three collaborators per repository for free. Starting from April 15, 2020, the free plan allows unlimited collaborators, but restricts private repositories to 2,000 minutes of GitHub Actions per month. As of January 2020, GitHub reports having over 40 million users and more than 190 million repositories (including at least 28 million public repositories), making it the largest host of source code in the world.

a) To open github

Open your choice Browser

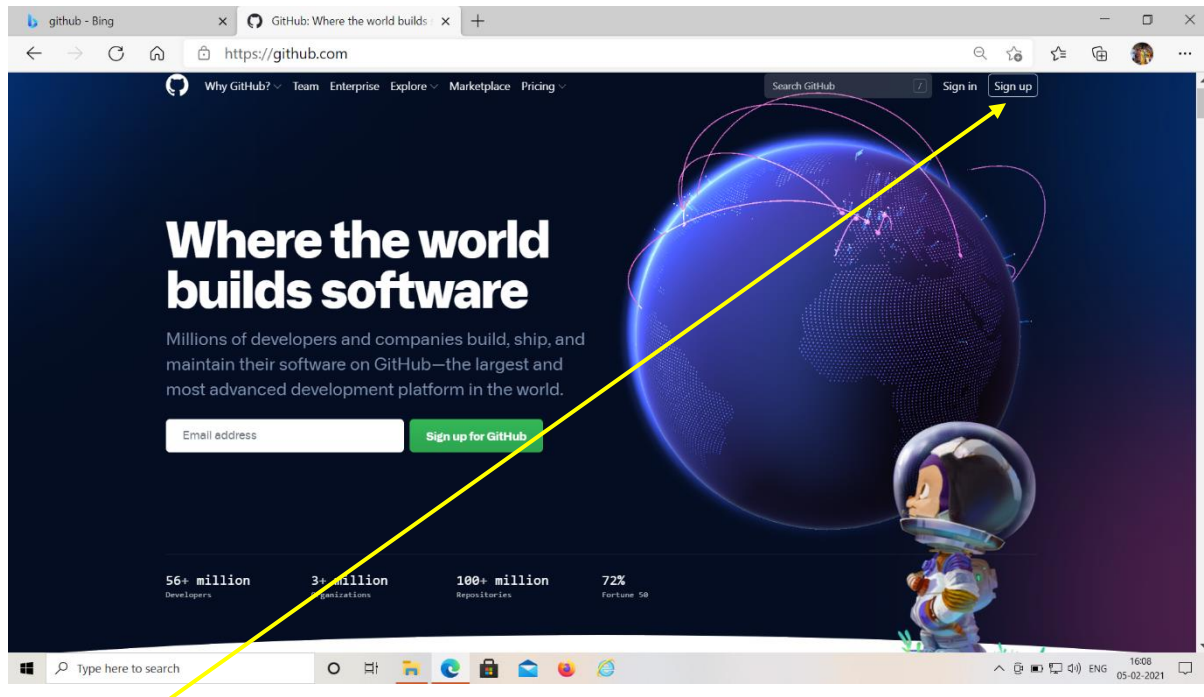


Search for github.com



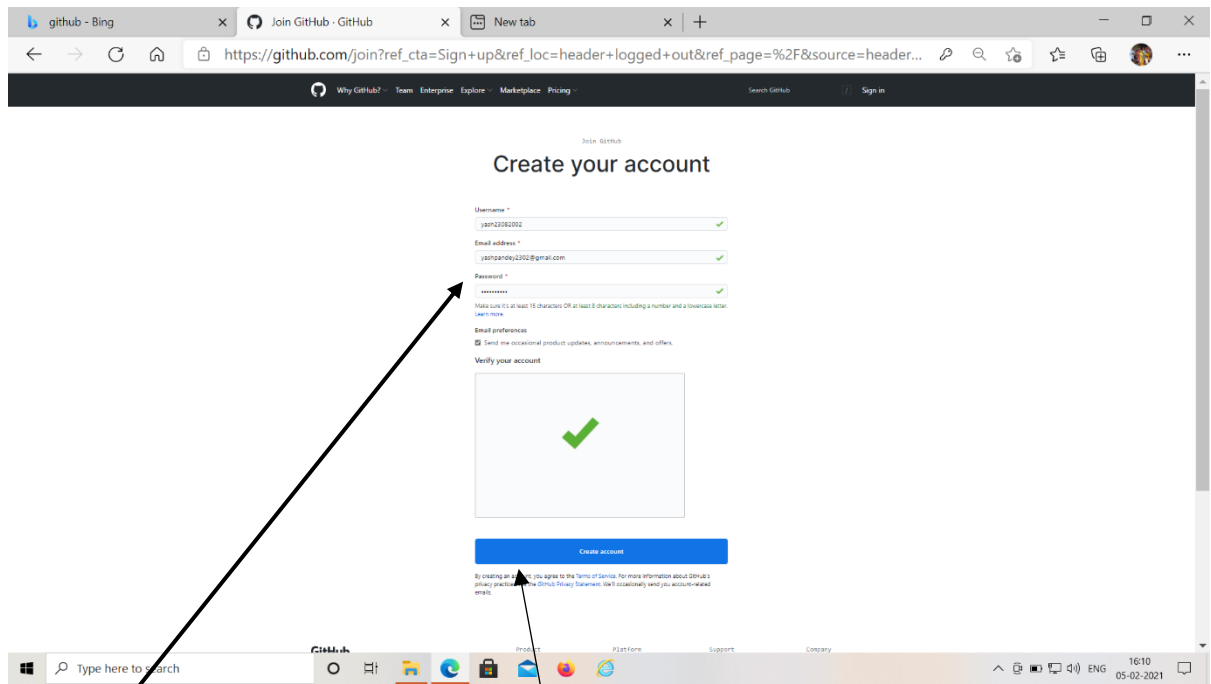
Click on the official site of github

Then the official page of github will open



a) To create account on github

click on the sign up

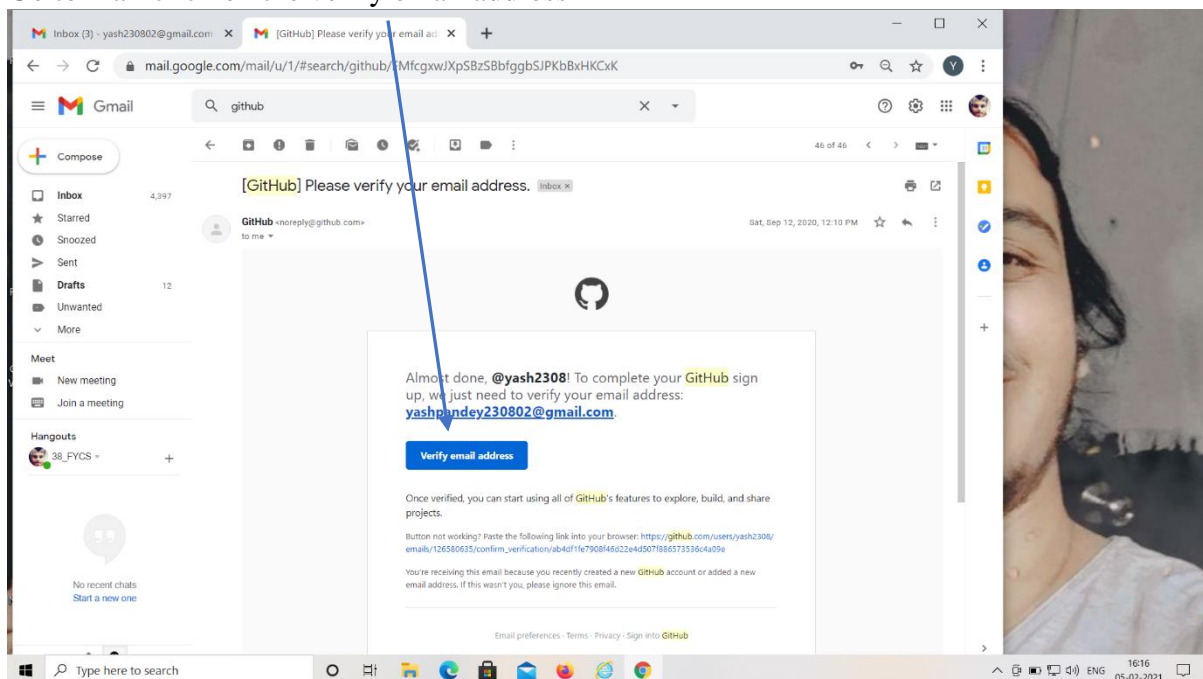


Then fill your detail in given blanks

And then verify the given captcha and click on the create account

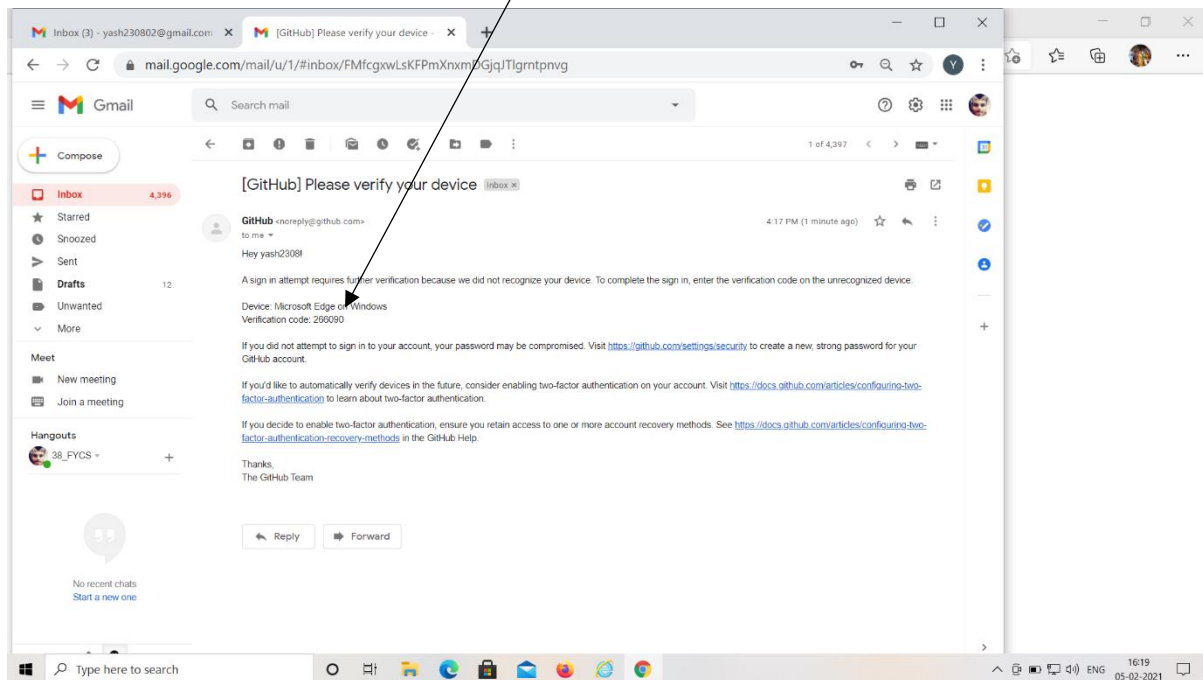
Now a verification email will be send to your mail

Go to mail click on the verify email address

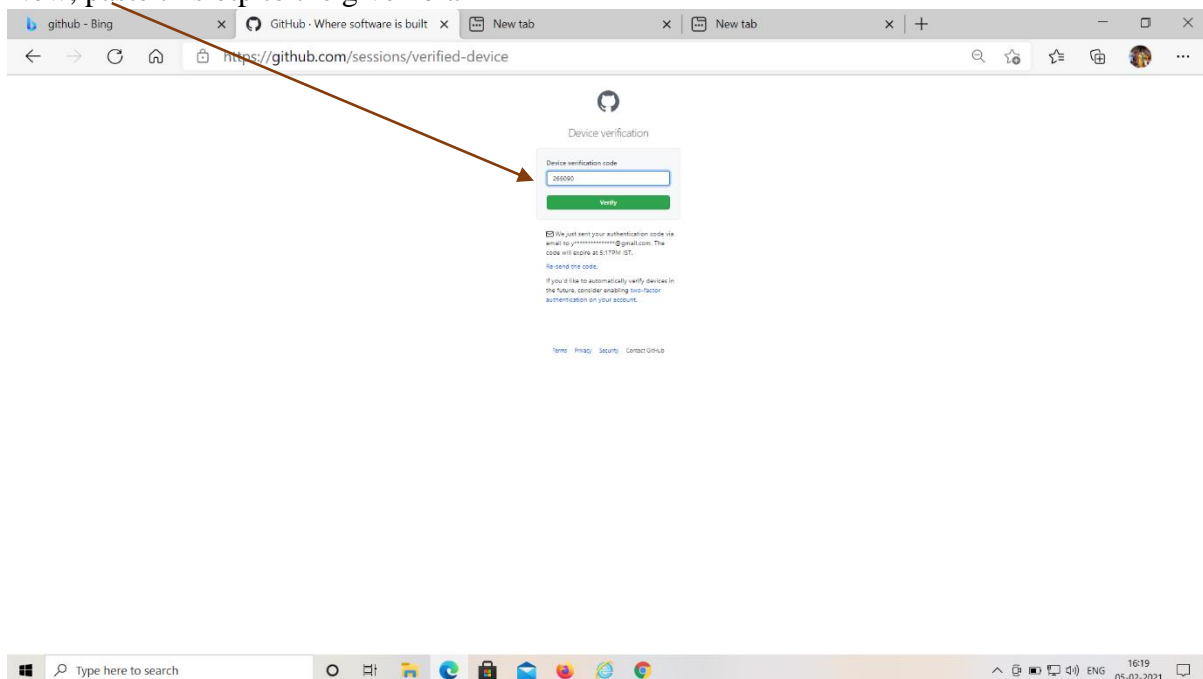


Now verify your device

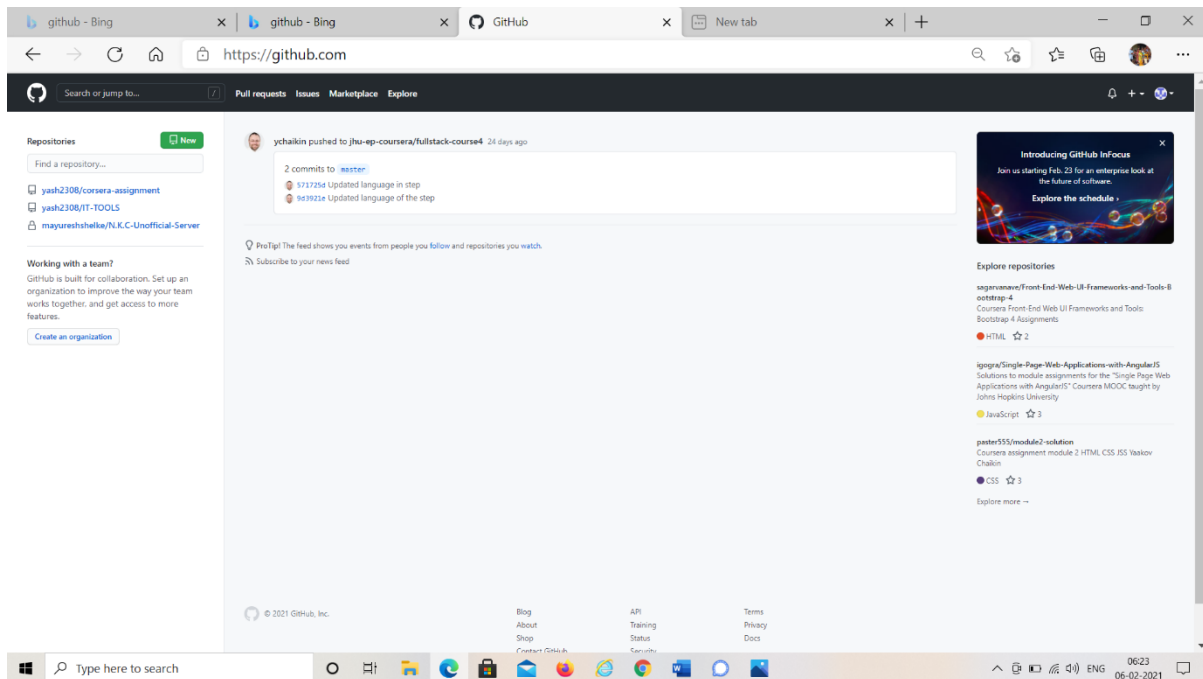
An email will be send to your mail, an otp.



Now, paste this otp to the given blank



Now your account is ready

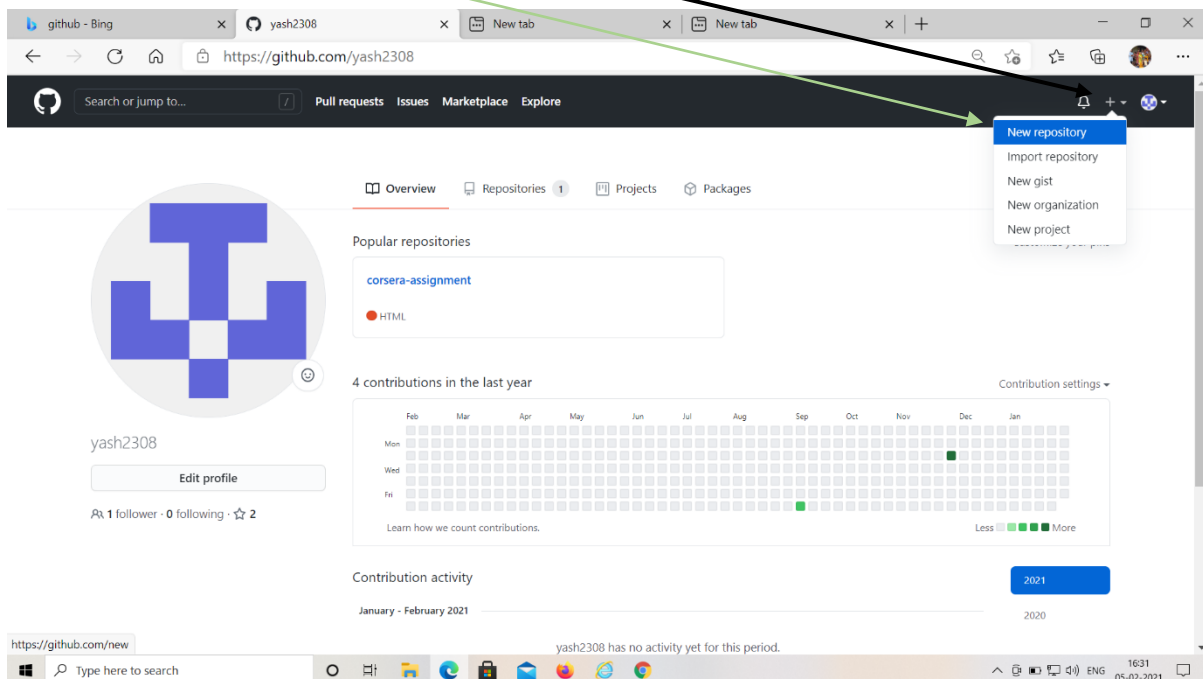


b) To create repository

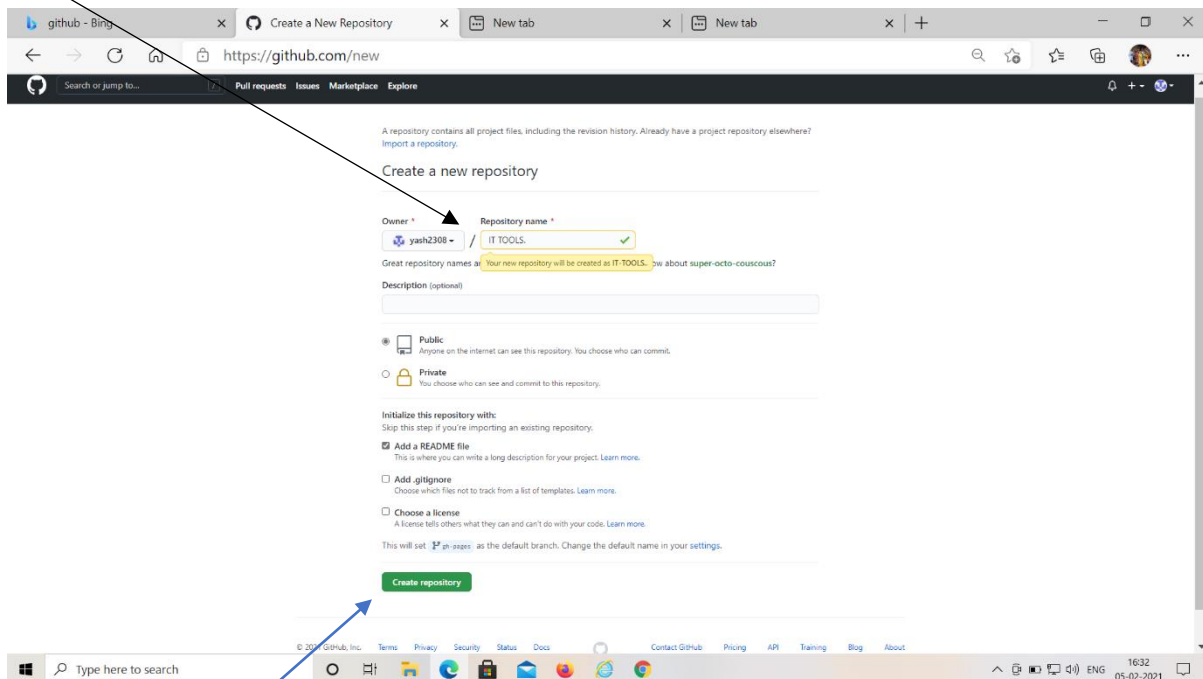
Go to your account

On right hand side there is a '+' option click on it

And click on new repository



Name your repository



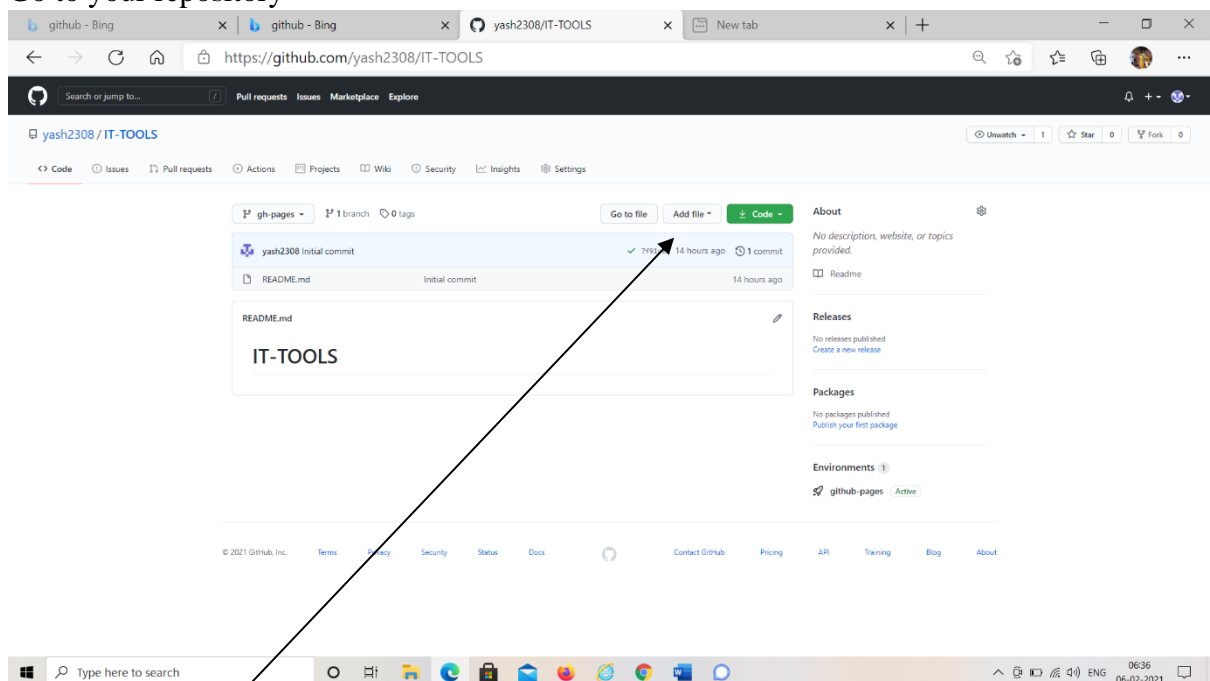
Click on the create repository

Now your repository is been created...

c) To add file

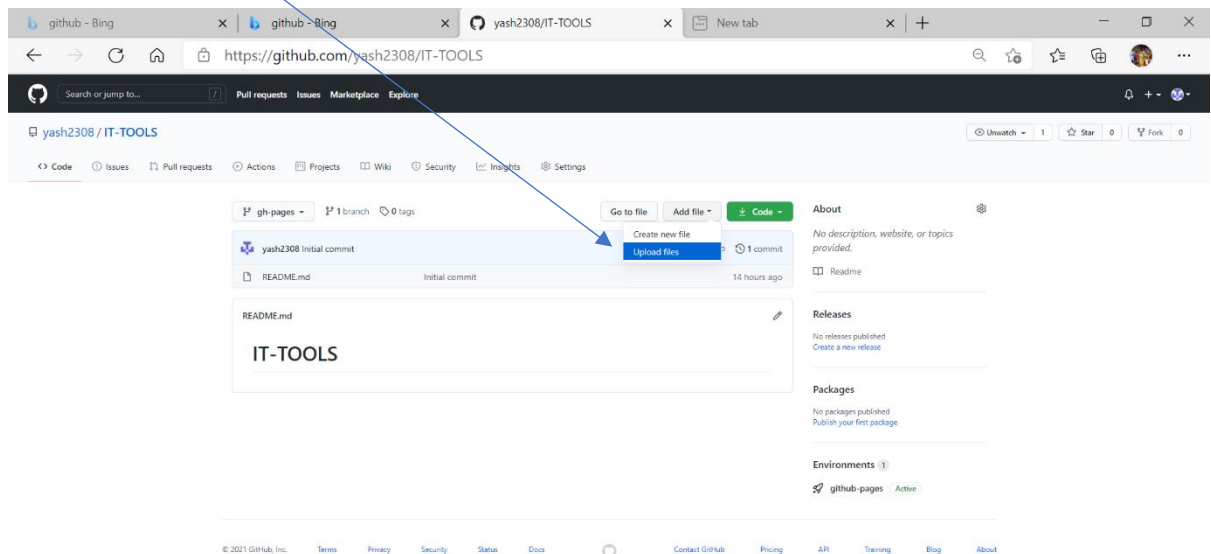
Now to add an file in your repository

Go to your repository

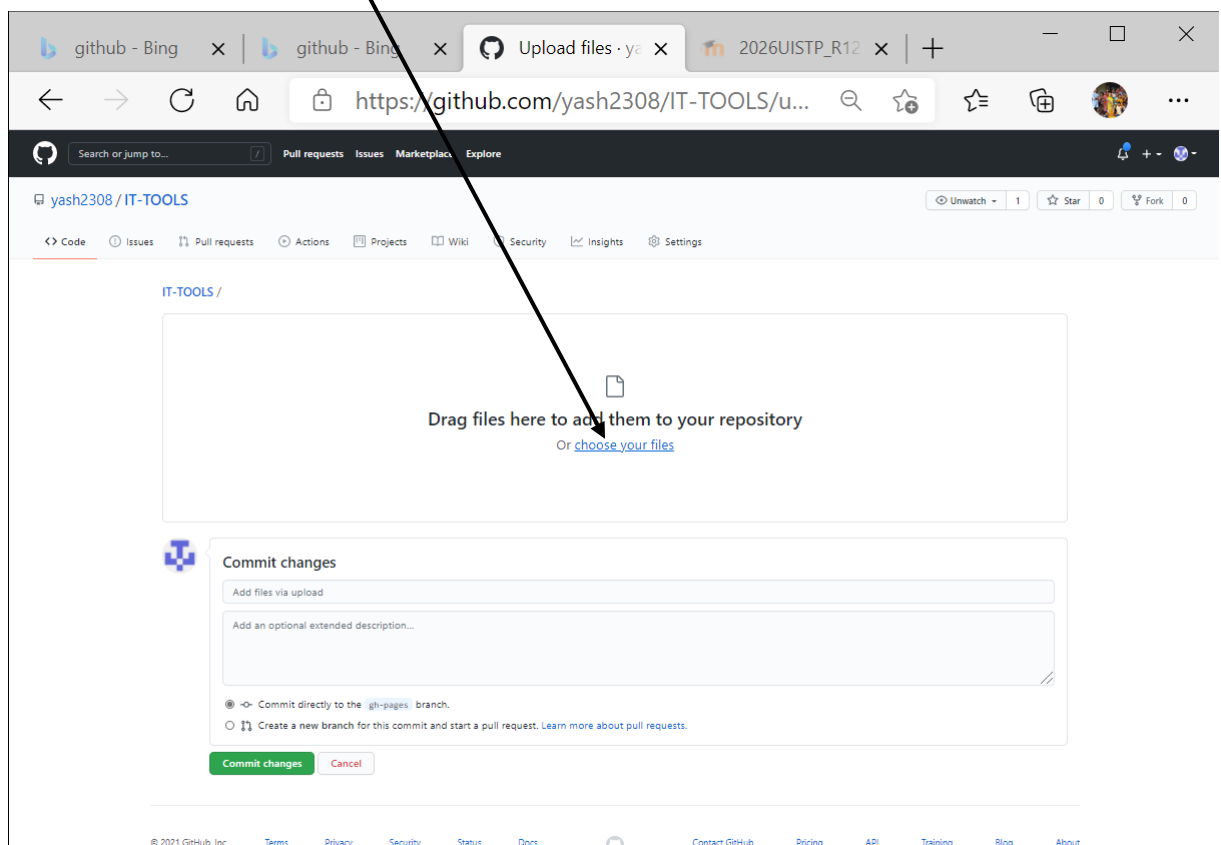


Click on add file

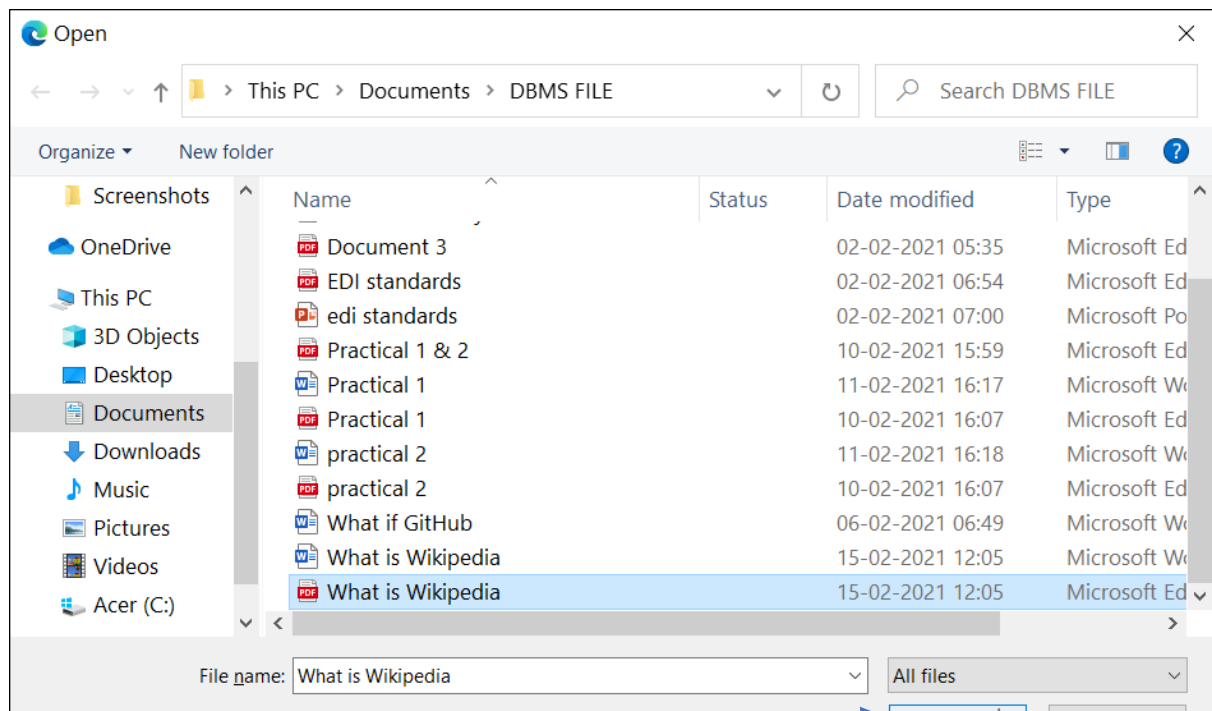
Then click on upload file



Then click on the choose your file

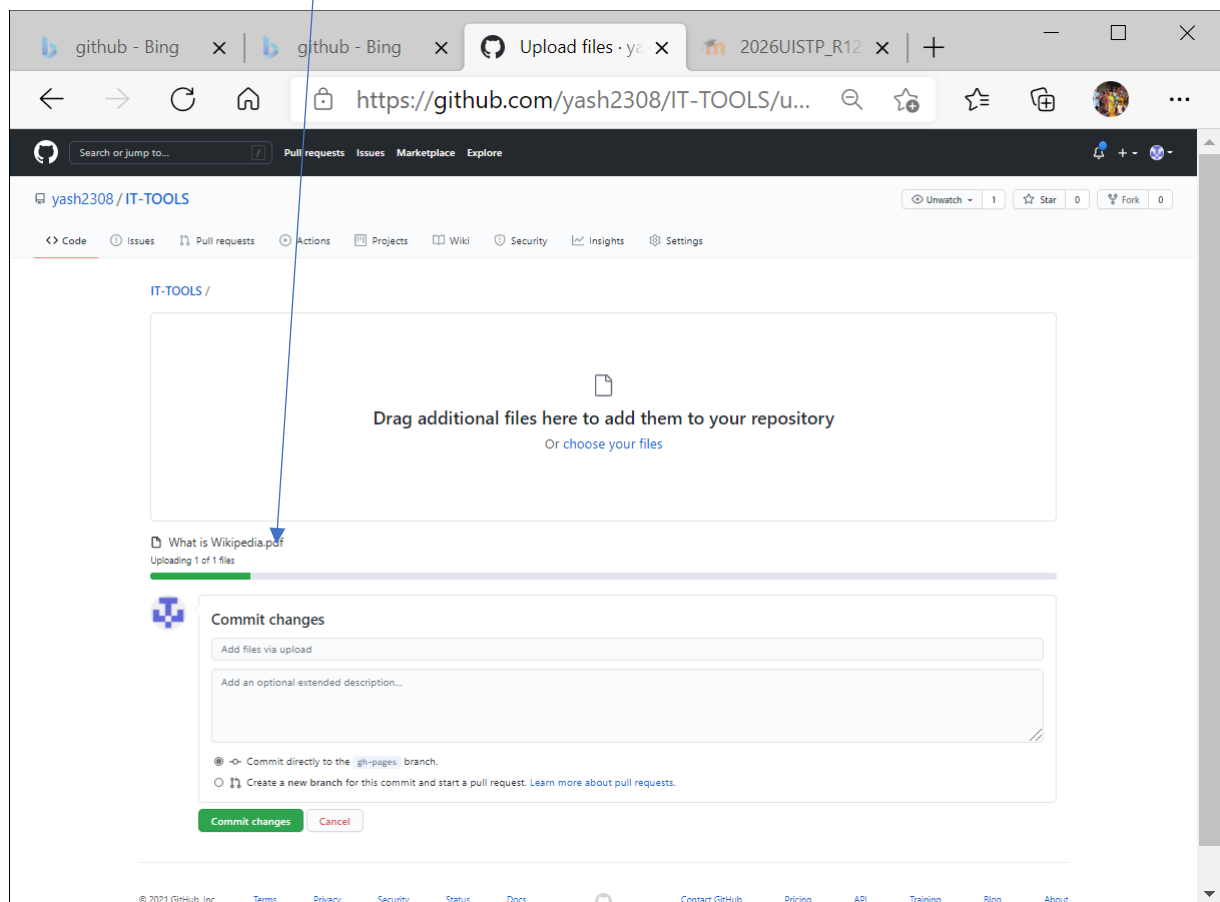


Then choose your file from the folder



Then click on the open

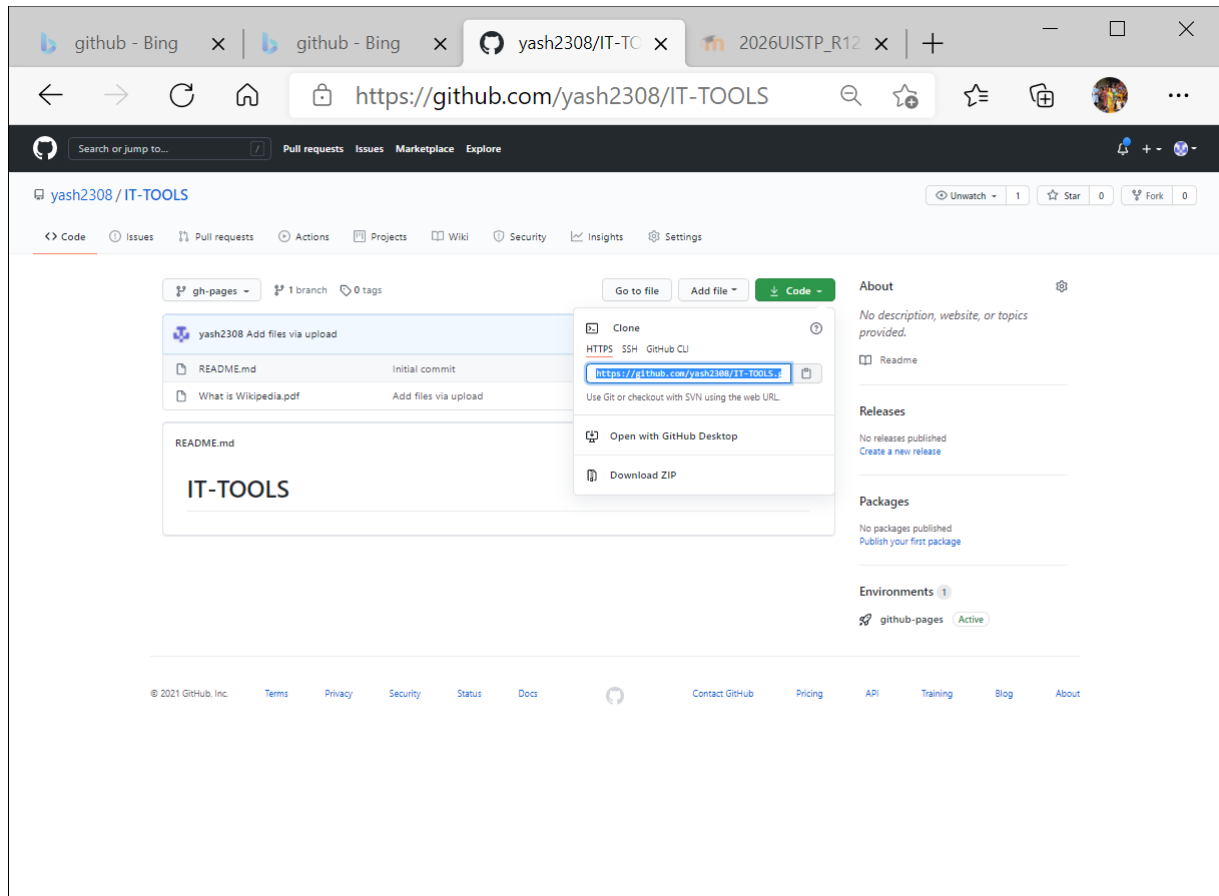
And your file is been uploading



Now click on the commit changes

And your file is been uploaded properly

Now click on code and click on the copy option



Now your repository is been cloned.

Now shair the link to anyone.

PRACTICAL 3

BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

1. Describe Open Source Software with Example.

→ Open-source software (OSS) is any computer software that's distributed with its source code available for modification. That means it usually includes a license for programmers to change the software in any way they choose: They can fix bugs, improve functions, or adapt the software to suit their own needs

While its lack of cost is a key advantage, OSS has several additional benefits:

- Its quality can be easily and greatly improved when its source code is passed around, tested, and fixed.
- It offers a valuable learning opportunity for programmers. They can apply skills to the most popular programs available today.
- It can be more secure than proprietary software because bugs are identified and fixed quickly.
- Since it is in the public domain, and constantly subject to updates, there is little chance it can become unavailable or quickly outmoded—an important plus for long-term projects.

Open-source technologies helped establish much of the internet. Furthermore, many of the programs in use every day are based on open-source technologies. Cases in point: Android OS and Apple's OS X are based on the kernel and Unix/BSD open-source technologies, respectively.

Other popular open-source software is:

- Mozilla's Firefox web browser
- Thunderbird email client
- PHP scripting language
- Python programming language
- Apache HTTP web server

2. Describe Free Software with Example

→ Free software is software 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 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.

Free software is easily confused with freeware, term describing software that can be freely downloaded and used but which may contain restrictions for modification and reuse.

Best Free software at a glance:

1. LibreOffice
2. VLC Media Player
3. GIMP
4. Shortcut
5. Brave
6. Audacity
7. KeePass
8. Thunderbird
9. FileZilla
10. Linux

3. Difference between Free and Open Source 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.

- Coined by the development environments around software produced by open collaboration of software developers on the internet.
- Later specified by the Open Source Initiative (OSI).
- It does not explicitly state ethical values, besides those directly associated to software development.

| S.No. | Free Software: | Open Source Software : |
|-------|--|---|
| 1. | Software is an important part of people’s lives. | Software is just software. There are no ethics associated directly to it. |
| 2. | Software freedom translates to social freedom. | Ethics are to be associated to the people not to the software. |
| 3. | Freedom is a value that is more | Freedom is not an absolute concept. |

| S.No. | Free Software: | Open Source Software : |
|-------|--|--|
| | important than any economic advantage. | Freedom should be allowed, not imposed. |
| | Examples: The Free Software Directory maintains a large database of free-software packages. Some of the best-known examples include the Linux kernel, the BSD and Linux operating systems, the GNU Compiler Collection and C | Examples: Prime examples of open-source products are the Apache HTTP Server, the e-commerce platform ecommerce, internet browsers Mozilla Firefox and Chromium (the project where the vast majority of development of the freeware Google Chrome is done) and the full office suite LibreOffice. |
| 4. | library; the MySQL relational database; the Apache web server; and the Send mail transport agent. | |

PRACTICAL NO.4.WRITING E-MAIL

**Requesting for extension of submission date of assignment till
12.03.2021**

1 message

38_FYCS_yashpandey <yashpandey230802@gmail.com>

Tue, 9 Mar, 2021 at 20:21

To: Roshnisingh9819@gmail.com

I,Yash Pandey , student of FYCS Roll no.38 , is writing this letter to you for requesting to extend the submission date of assignment till 12.03.2021.

I was unable to submit the assignment on time because I was having high fever .

Next time this will not happen.I will submit all assignment or projects on time.

Looking forward for your positive response.

Encl :

My Reports

SIGNATURE

Practical No 5

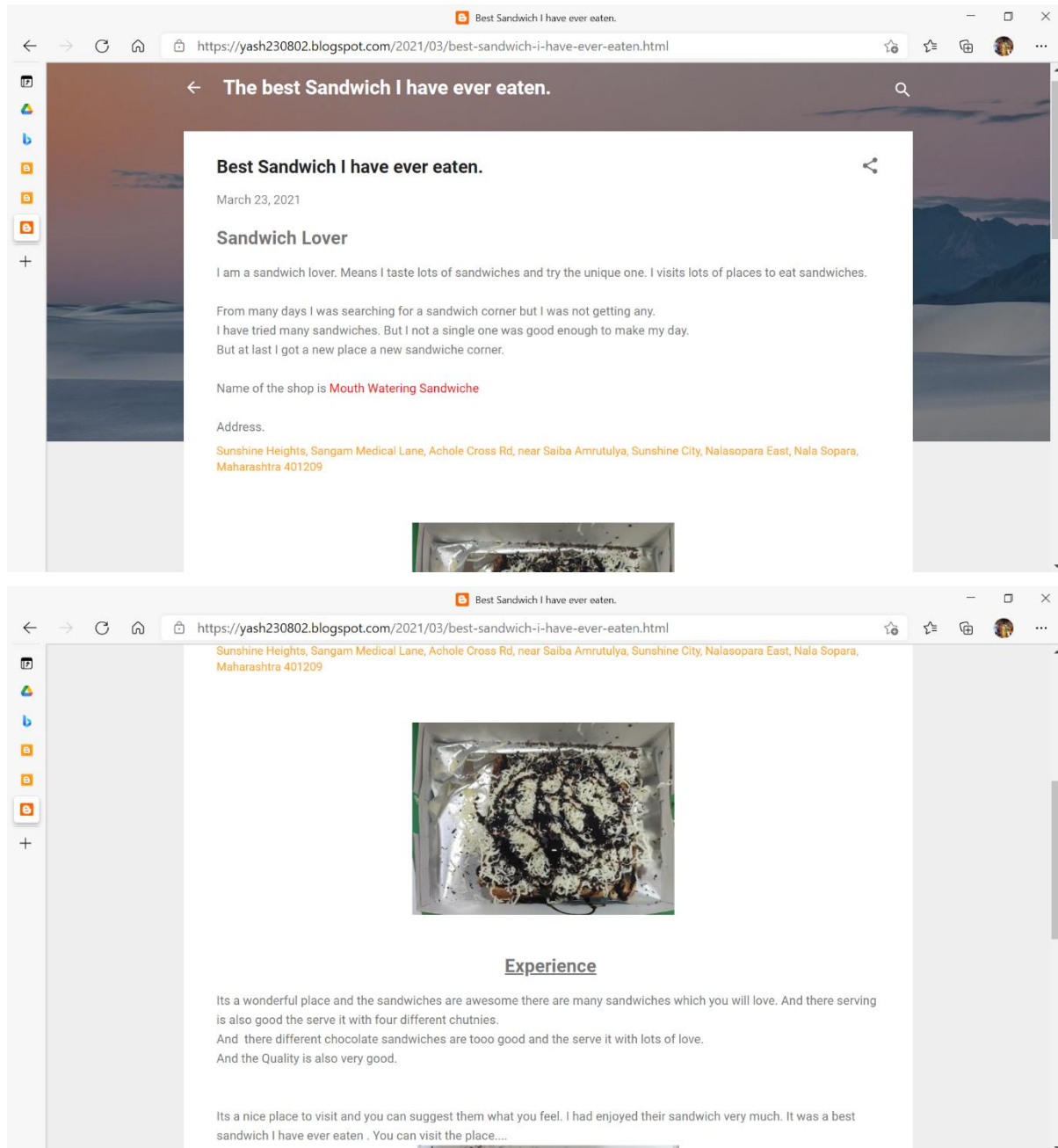
GREEN COMPUTING

- A. Using practical examples, describe green computing. List and explain the steps that you take to contribute to green computing.
- Green computing is environmentally responsible and eco-friendly use of computers, It is also defined by being the using and disposing of computing devices in a way that reduces their environmental contact. Some steps that we could take to contribute to green computing are:
 - 1) Power down when not in use Seems simple but many of us leave computers powered up for a long time when not in use a A large sum of power is being wasted, so if you're not using the computer press the power button to shut it off until needed. This can be done even if the computer is working on something. Screensavers do not save power. The same goes for computers, you don't have to shut it down completely if you don't want to reboot, just use sleep or hibernation mode. This will help save energy and keep the system in its current state when you need it again.
 - 2) Purchase energy-saving hardware If you don't need super-fast computing power then look out for energy-efficient components when buying a new computer, such as green hard drives and low-energy processors. While performance is slower and they can use remarkably less power. Purchasing an energy-saving power supply unit for a desktop PC can help the environment and save money, they're often quieter too.
 - 3) Use the power-saving features All computers include power-saving options. Using these features you can command the computer to do various energy-saving tasks automatically, including shutting off unused hard disks, powering off a monitor after a given time, or even placing the computer into sleep mode when not in use. This is very useful on laptops to help preserve battery life.
 - 4) 4)Disposal of e-waste While new computers are being made every day, old computers are being discarded-thus creating a lot of e-waste. When we throw away our old computers to buy new ones, we are just adding to the e-waste. You can't burn e-waste because it will release harmful gases. Try to sell your old products after buying new so that most e-waste can be avoided.
 - 5) Use a laptop instead of desktop Laptops are much better for the environment than desktop computers as they have components that require less power. If you don't need a desktop computer to consider buying a laptop instead, or if you have both, use the laptop as much as possible before considering the desktop.
 - 6) Recycle responsibly Computer hardware is filled with different materials which can be hazardous to the environment so make sure you dispose of old components effectively. Don't just throw broken technology in the bin,

take the time to trace local recycling organizations. There should be companies that can remove the metals which may fix or furnish items. You should check with your local authorities to find out what facilities they offer for safe disposal of old computing parts.

Practical No 6

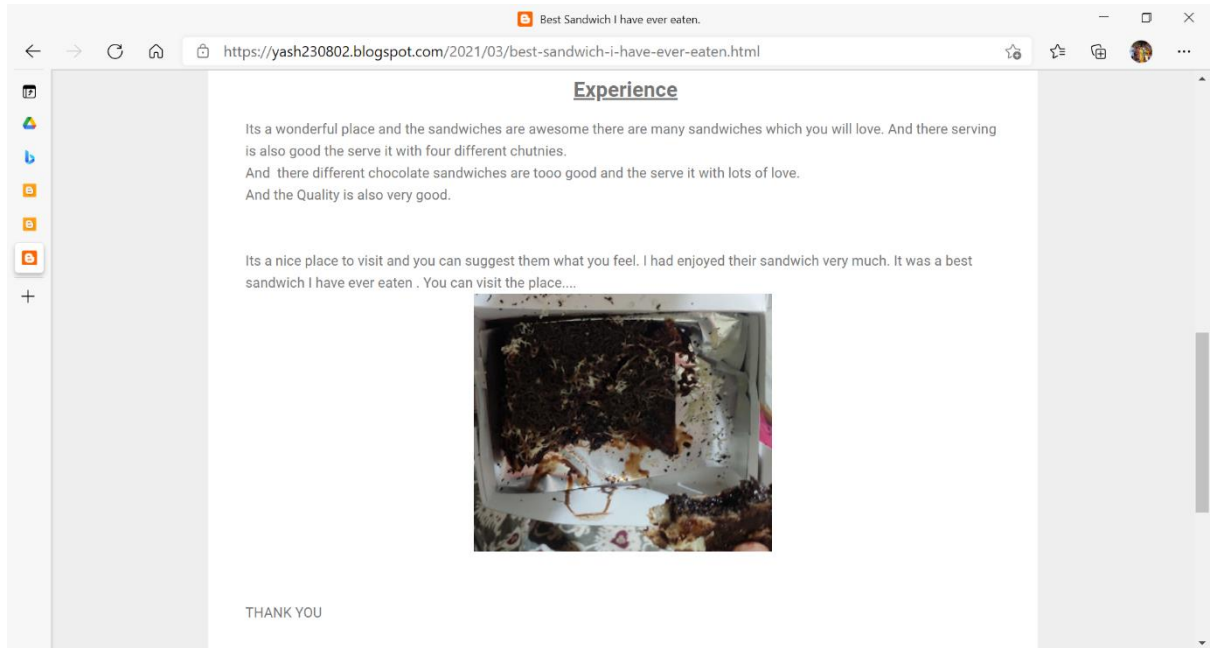
BLOG



A screenshot of a web browser displaying a blog post. The browser's address bar shows the URL: https://yash230802.blogspot.com/2021/03/best-sandwich-i-have-ever-eaten.html. The page title is "Best Sandwich I have ever eaten." The main content area has a section titled "Experience" in blue text. Below this title, there are three paragraphs of text: "Its a wonderful place and the sandwiches are awesome there are many sandwiches which you will love. And there serving is also good the serve it with four different chutnies.", "And there different chocolate sandwiches are too good and the serve it with lots of love.", and "And the Quality is also very good." Below the text is a photograph of a sandwich in a white paper container, which appears to be a chocolate sandwich with various toppings. The page ends with "THANK YOU".

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Practical No 7

Implementing coding practices in python using PEP8

PEP8 is a style guide for python code. PEP stands for Python Enhancement Proposal, and they describe and document the way python language evolves. It is a document that describes new features proposed for python and document aspects of python, like design and style. It promotes a very readable and eye-pleasing coding style.

Some things to keep in mind are:

1. Use 4-space indentation and no tabs. Example:

```
it tools.py
1  # Aligned with opening delimiter.
2  grow = function_name(variable_one, variable_two,
3  | variable_three, variable_four)
4  # First line contains no argument. Second line onwards
5  # more indentation included to distinguish this from
6  # the rest.
7  def function_name ( |
8  |     variable_one , variable_two , variable_three ,
9  |     variable_four ):
10 |     print (variable_one)
11
```

2. Use docstrings: there are both single and multi-line docstrings 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. Example:

```
"""This is single line docstring"""
"""This is
a
multiline comment"""
```

3. Wrap lines so that they don't exceed 79 characters: The Python standard library is conservative and requires limiting lines to 79 characters. The lines can be wrapped using parenthesis, brackets, and braces. They should be used in preference to backslashes. Example:

```
with open ( '/path/from/where/you/want/to/read/file' ) as file_one, \
open ( '/path/where/you/want/the/file/to/be/written' , 'w' ) as file_two:
    file_two.write(file_one.read())
```

4. While naming the function of methods always use self for the first argument. If the function argument name matches with reserved words then it can be written with a trailing comma. Example:

```
# Python program to find the
# factorial of a number provided by the user.
# change the value for a different result |
num = 7
# uncomment to take input from the user
#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)
```

```
PS D:\Users\Documents\FYCS SEM 2\IT Tools> python -u "d:\Users\Documents\FYCS SEM 2\IT Tools\it tools.py"
Enter a number: 10
The factorial of 10 is 3628800
PS D:\Users\Documents\FYCS SEM 2\IT Tools> |
```

