

**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. _____ IMRAN RIZWAN SHAIKH _____

Roll No: ____ 109 ____ 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)

Sr. No.	DATE	TITLE	SIGN
1.	2/2/21	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.	9/2/21	Creating account, repository on GitHub and Cloning repository in GitHub Page	
3.	16/2/21	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.	23/2/21	WRITING EMAIL	
5.	25/2/21	Using practical examples, describe green computing. List and explain the steps that you take to contribute to green computing	
6.	2/3/21	WRITING BLOGS	
7.	9/3/21	Implementing coding practices in Python using PEP8.	
8.	18/3/21	PRESENTATION: ENERGY MANAGEMENT TECHNIQUE IN HARD DISK	

PRACTICAL 1:INTRODUCTION AND CONTRIBUTION TO WIKIPEDIA

- a) Description about Wikipedia and its features

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. [The Economist](#) newspaper placed it as the "13th-most-visited place on the web".^[4] 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.

FEATURES:

1) Create a page

To contribute to a Wiki, you'll start by creating a page. All pages have a title and text. Unlike pages of a normal website, you won't need to know any code to contribute content here. You can write and format text on a Wiki page like you would an email.

Edit a page

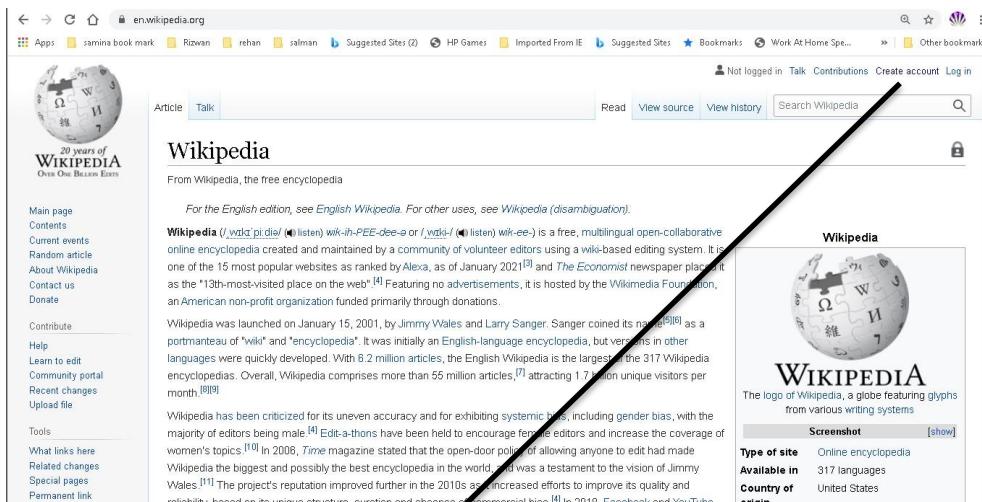
Published pages can be edited by anyone that reads them. If, for example, you notice that a page created by someone else contains inaccurate/outdated information, you can open the editing screen and correct that information directly.

Link between pages

Linking between Wiki pages makes it easier for readers to find secondary materials they may need, especially as your Wiki grows

PRACTICAL 1

b) Creating Account on Wikipedia

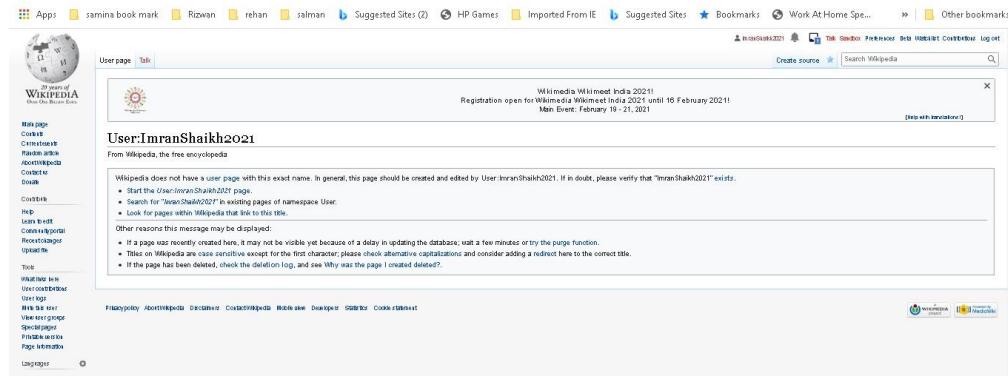


1) Click on :Create Account

A screenshot of the 'Create account' page on Wikipedia. The page has a header 'Special page' and 'Create account'. It includes fields for 'Username' (with placeholder 'help me choose'), 'Password', 'Confirm password', and 'Email address (optional)'. Below these fields is a CAPTCHA box containing the text 'enjoyhenry' and a CAPTCHA Security check button. To the right of the form, there is a sidebar with statistics: '999,834,357 edits', '6,241,309 articles', and '144,356 recent contributors'. A large black arrow points from the text '2) Enter the details and click on :Create your account' to the 'Create your account' button at the bottom of the form.

2) Enter the details and click on :Create your account

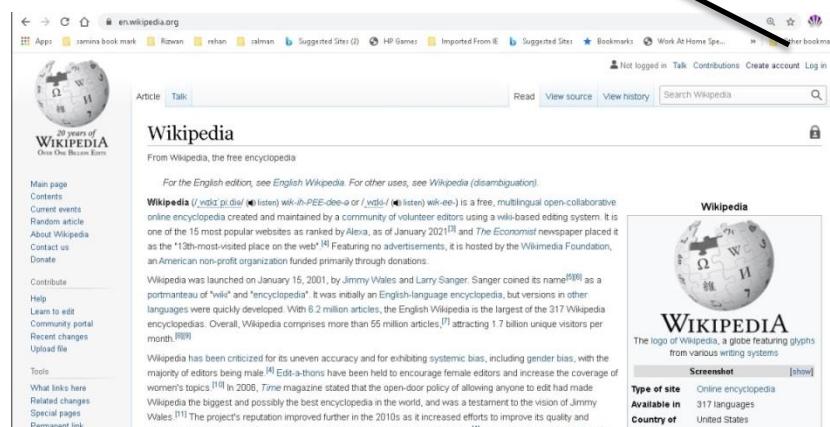
PRACTICAL 1



3) Your page will create.

c) Creating your page on Wikipedia

1) After creating account click on Log in



2) Enter your Username and password

Log in

Username

Password

Keep me logged in (for up to 365 days)

Log in

Help with logging in

Forgot your password?

PRACTICAL 1

3) Your account will open and search your name in Search Wikipedia

The screenshot shows a Wikipedia search results page for the query "Imran Shaikh". At the top, there is a navigation bar with links for "Read", "View source", "View history", and a search bar containing "Search Wikipedia". Below the search bar is a lock icon indicating the page is protected. The main content area displays a single search result for "Imran Shaikh", which includes a summary, a picture of a person, and a link to the full article.

4) Then click on “ask for it to be created”

The screenshot shows a Wikipedia search results page for the query "imran shaikh". The search bar at the top contains "Imran Shaikh". Below the search bar, there is an "Advanced search" section with a "Sort by relevance" button. A "Did you mean" section suggests "imran sheikh". The main content area displays a message stating that the page does not exist and asks if it should be created. It also provides a brief summary of Abdul Hafeez Shaikh's work. At the bottom, there is a timestamp and a copyright notice.

5) Then click on “Click here to start a new article”

Creating an article

Before you start writing, here are some things you should have in mind:

- Make sure that the topic is notable enough for an article. If it already exists, it will never be accepted as an article. If yes, have you improved the existing article?
- Articles should reflect only what reliable sources have said about the topic.
- If you have a conflict of interest with the topic you are writing about, disclose it.
- If you are being paid to contribute to Wikipedia, you **must**—under no circumstances—use a pseudonym or other relevant affiliation.
- If you have an idea for the title of an article, but no content for the article, consider creating a stub.

Your article title will have "Draft:" in front of it until it is accepted as an article.

[Click here to start a new article](#)

Submitting for review

PRACTICAL 1

6) Then simply click on Next-Next-Next-I'm writing about.....subject-



There are a lot of common mistakes that are made with drafts. Here are some:

- **Writing about yourself or someone/something you're close to**
Whether it is yourself, a family member, a friend, an employer or people close to you) is discouraged as the article you will create.
- **Copy-pasting material**
You must write the article in your own words, or it may be deleted.
- **Not citing your sources**
Articles without independent reliable sources usually get deleted.
- **Overly promotional language**
Terms like "leading expert" and "ground-breaking technology" are not allowed on Wikipedia. Let the facts speak for themselves.

I'm paid to edit

I'm writing about myself, or a close person/subject

I'm not connected to the subject

Then click on “I have Disclosed”



Disclosing your relationship with the subject is important in assisting you in making your content more suitable for Wikipedia.

Here are the steps to disclose:

- Edit your user page by clicking [here](#)
- Paste the following in the edit box, replacing `Title of`
 `{{UserboxCOI |1=Title of your draft}}`
- Click the "**Publish changes**" button

You must complete these steps in order to continue.

I have disclosed

Write a draft name



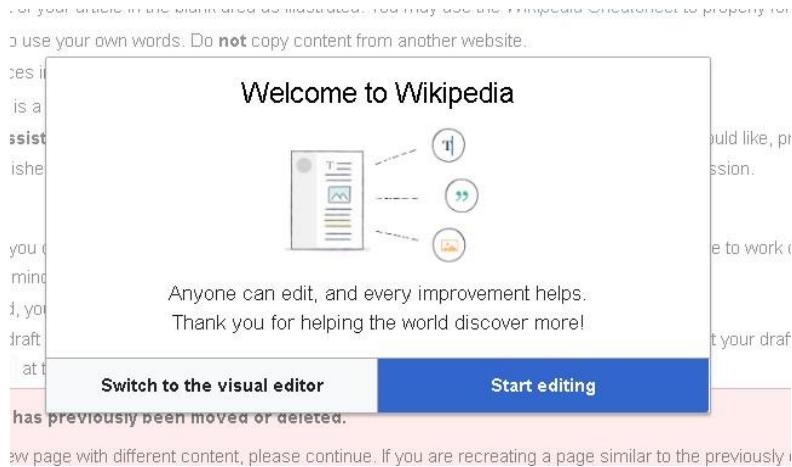
You're all ready to go! When you create your draft, it will not be seen by external search engines. However, when you finish, you'll be able to submit it to be reviewed by our volunteers. Reviews can take a long time, so please be patient and rest assured that your draft will be reviewed in due course. This may take 3 months or more, since drafts are reviewed in no specific order.

Enter your draft name here

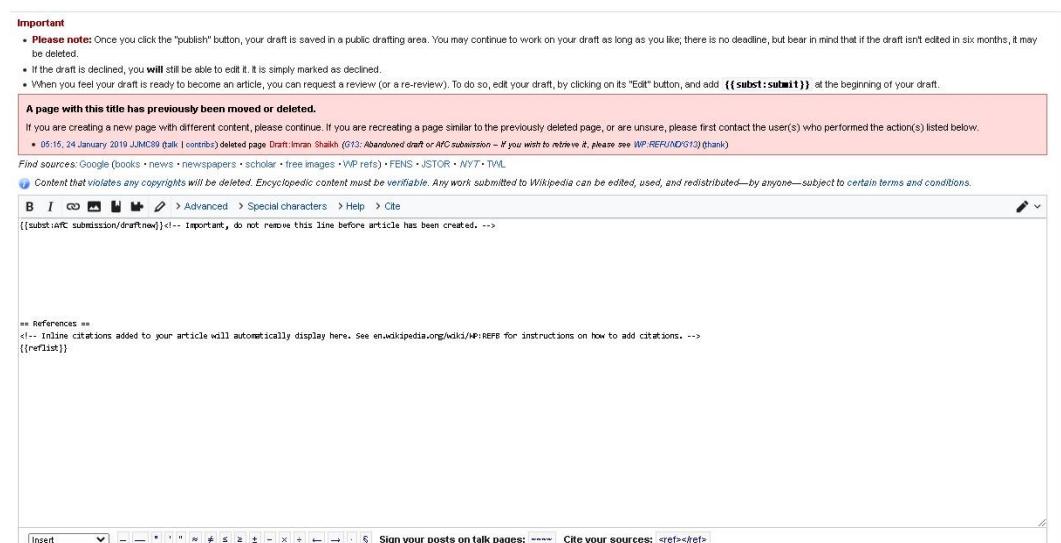
Create new article draft

Click on “Start editing”

PRACTICAL 1



Start creating your page



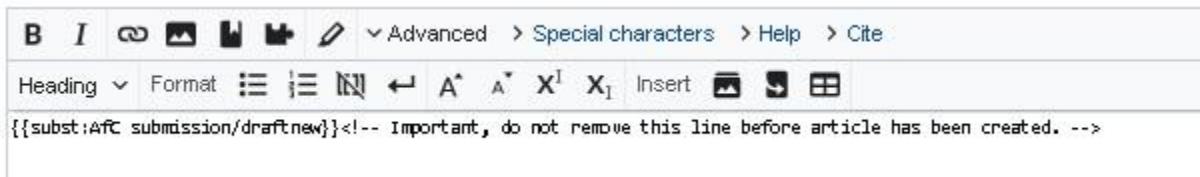
At last click on ‘Publish page’



YOUR PAGE WILL CREATED.

PRACTICAL 1

c) Editing your page on Wikipedia



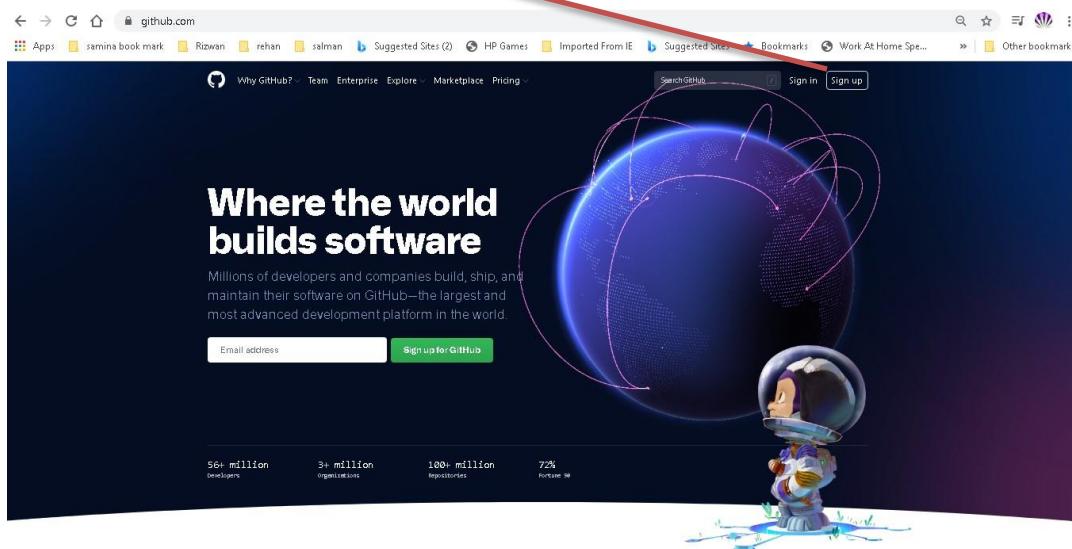
Once you logged in to your account you can create your page and even you can do editing also. You can use these option to edit your Wikipedia page and make it attractive.

PRACTICAL 2

PRACTICAL 2: CREATING ACCOUNT, REPOSITORY ON GITHUB AND CLONING REPOSITORY IN GITHUB

a) Creating Account

- 1) Open the GitHub website
- 2) Click on Sign up



- 3) Create your account by Filling form and click on Create account

A screenshot of the GitHub 'Create your account' form. The URL 'github.com' is in the address bar. The page title is 'Create your account'. It has three input fields: 'Username *', 'Email address *', and 'Password *'. Below these are sections for 'Email preferences' (checkboxes for 'Send me occasional product updates, announcements, and offers.' and 'Verify my account') and a note about agreeing to the Terms of Service. At the bottom is a large blue 'Create account' button with a white checkmark icon.

PRACTICAL 2

4) Your account will create and you get a Welcome page

The screenshot shows the GitHub Welcome page. At the top, there's a navigation bar with links for 'Search or jump to...', 'Pull requests', 'Issues', 'Marketplace', and 'Explore'. Below that, it says 'Selected plan: Free'.

Welcome to GitHub

Woohoo! You've joined millions of developers who are doing their best work on GitHub. Tell us what you're interested in. We'll help you get there.

What kind of work do you do, mainly?

Software Engineer I write code	Student I go to school
Product Manager I write specs	UX & Design I draw interfaces
Data & Analytics I analyze numbers	Marketing & Sales I look at charts
Tescher I educate people	Other I do my own thing

How much programming experience do you have?

None I don't program at all	A little I'm new to programming
A moderate amount I'm somewhat experienced	A lot I'm very experienced

How much programming experience do you have?

What do you plan to use GitHub for?
(Select up to 3)

Write or code	Use GitHub	Host a project (repository)
Create a website with GitHub Pages	Collaborating with my team	Find and contribute to open source
School work and student projects	Use the GitHub API	Other

I am interested in:

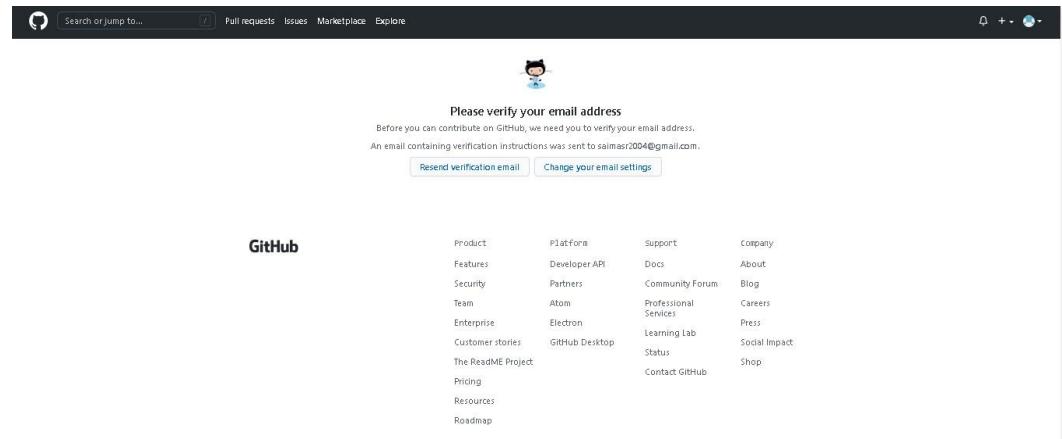
We'll connect you with communities and projects that fit your interests.
For example: `class phpuhuh .asplin`

Complete setup

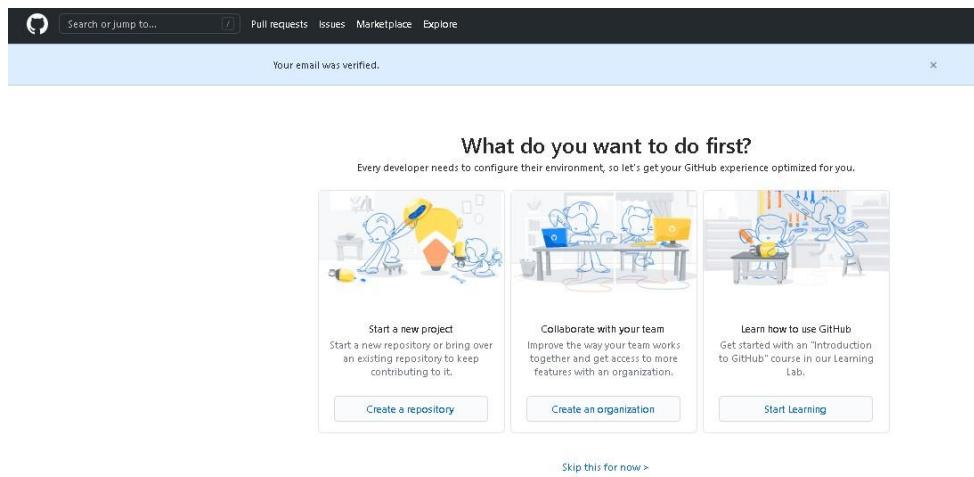
PRACTICAL 2

5) Choose the options according to your comfort and click on Complete Setup

6) Then you have to verify your email address by going on mail



7) As soon as you verify your E-mail, a page will open showing that “Your email was verified.”



b) Creating Repository

PRACTICAL 2

1) Once you got the verification page, you can click on create repository

Create a new repository

Owner * Repository name *

Shaikh-Saima /

Great repository names are short and memorable. Need inspiration? How about [potential-chainsaw](#)?

Description (optional)

Public Anyone on the internet can see this repository. You choose who can commit.

Private You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.

Add a README file This is where you can write a long description for your project. [Learn more](#).

Add .gitignore Choose which files not to track from a list of templates. [Learn more](#).

Choose a license A license tells others what they can and can't do with your code. [Learn more](#).

[Create repository](#)

2) Your new repository will create.

Search or jump to... Pull requests Issues Marketplace Explore

Learn Git and GitHub without any code!

Using the Hello World guide, you'll start a branch, write comments, and open a pull request.

[Read the guide](#)

Imranch2002 / DBMS

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

main · 1 branch · 0 tags · Go to file · Add file · Code · About · No description, website, or topics provided.

Imranch2002 Initial commit · 0 commits · 1 commit · Readme

README.md · Initial commit · yesterday

README.md · DBMS

Releases · No releases published · Create a new release

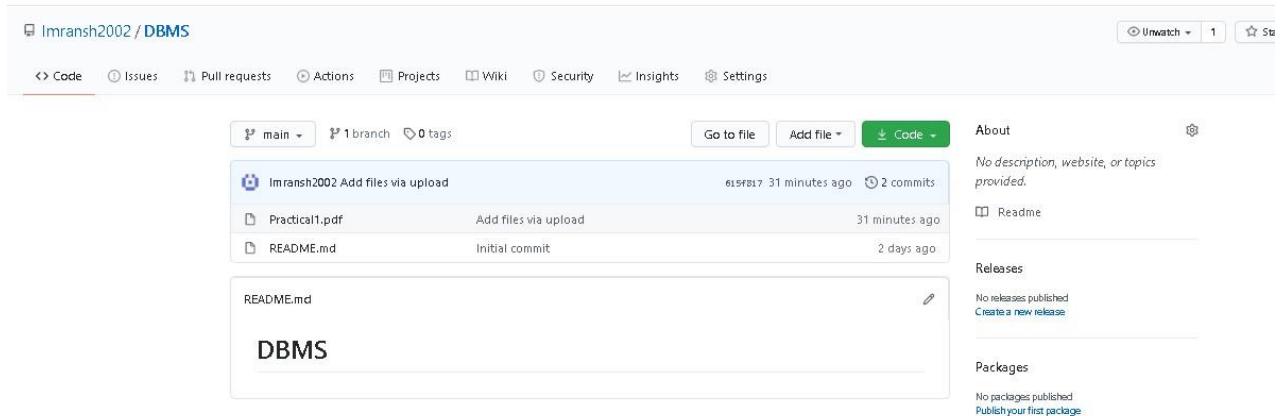
Packages

PRACTICAL 2

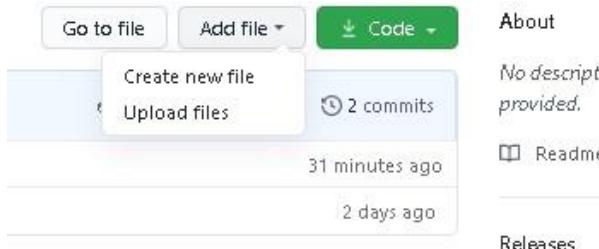
c) Cloning repository

Cloning means to get a code of your file and send someone so he/she can access your file.

1) First go to your account and go to code.

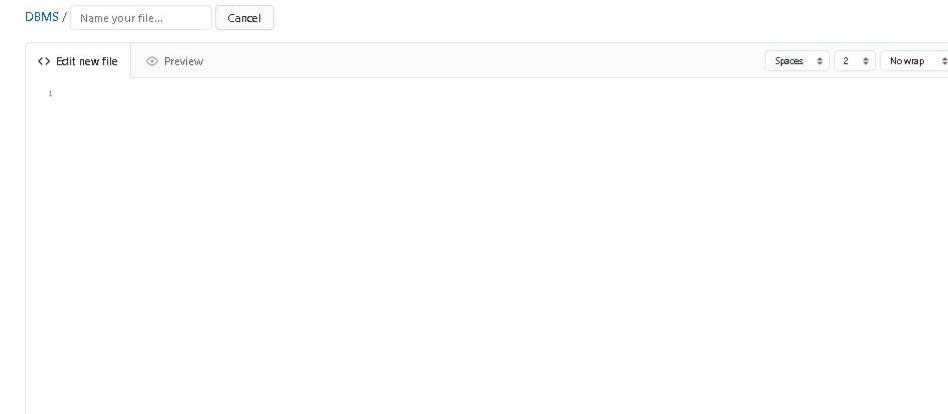


2) Click on Add file. Either you Create new file or Upload file.



3) Give name to file and select Readme option.

PRACTICAL 2



4) As you click on commit, your file will created.

Imranch2002 Create xyz
ad1c670 now 3 commits

Practical1.pdf Add files via upload 32 minutes ago

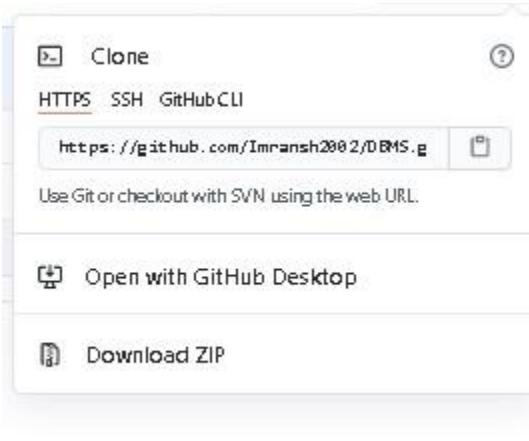
README.md Initial commit 2 days ago

xyz Create xyz now

README.md

DBMS

5) Click on clipboard icon under Clone option, right of the file box. From there you can copy link of the file and this is known as Cloning Repository.

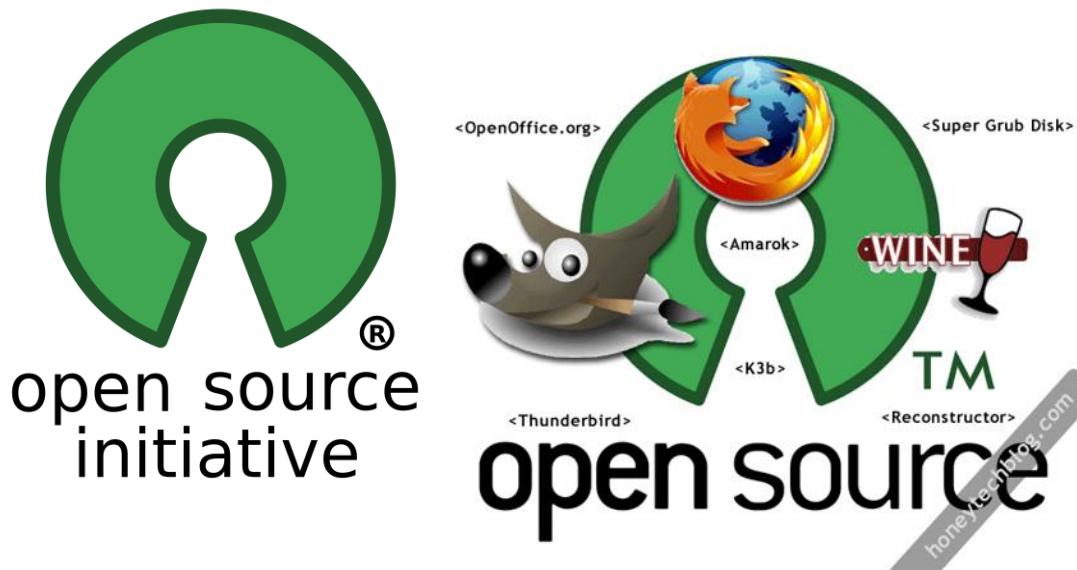


PRACTICAL 3

PRACTICAL 3: BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

a) *Describe Open Source Software with Example.*

Open-source software (OSS) is a type of computer software in which source code is released under a license 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 public manner.



- **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

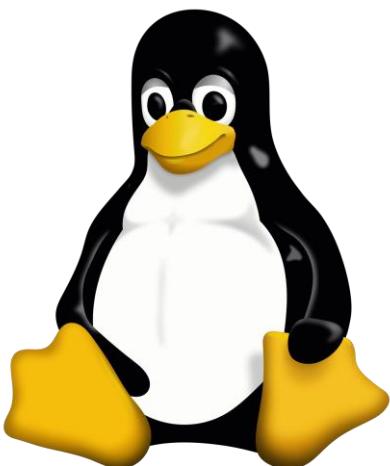
PRACTICAL 3

b) *Describe Free Software with Example*

“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. Thus, “free software” is a matter of liberty, not price. To understand the concept, you should think of “free” as in “free speech,” not as in “free beer”. We sometimes call it “libre software,” borrowing the French or Spanish word for “free” as in freedom, to show we do not mean the software is gratis.

A program is free software if it gives users adequately all of these freedoms. Otherwise, it is nonfree. While we can distinguish various nonfree distribution schemes in terms of how far they fall short of being free, we consider them all equally unethical.

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.



PRACTICAL 3

c) *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.

1. *Free Software is an important part of people’s lives.*
2. *Free Software freedom translates to social freedom.*
3. *Freedom is a value that is more important than any economical advantage.*
4. *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 library; the MySQL relational database; the Apache web server; and the Sendmail mail transport agent.*

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.*

PRACTICAL 3

4. *OpenSource Software is just software. There are no ethics associated directly to it.*
5. *Freedom is not an absolute concept. Freedom should be allowed, not imposed.*
6. *Examples: Prime examples of open-source products are the Apache HTTP Server, the e-commerce platform osCommerce, 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.*

**PRACTICAL 4
WRITING AN EMAIL**

Here is some tips which you can use to make your email more effective:

Rule #1: Imagine Receiving The Email You're Writing

Imagine that you are going to receive this Email. If you want to receive a good Email, Write good Email.

Rule #2: Write Like You Talk

1. The Subject Line

Write the Subject

Here are some example:

- I'm going to be in Town next Tues - are you available?
- Introduction to Kevin Bacon

2. Start with an appropriate greeting.

- Dear [First Name]
- Dear Mr./Ms. [Last Name]
- [Name]
- Good morning/afternoon
- Hi
- Hey
- Hey/Hi there

3. Keep your message short and concise.

If your message is short so one can read your Email without any stress but as he/she saw that the Email is very large may be he/she feel bored for reading your Email.

4. Use standard fonts.

- Arial
- Courier
- Georgia
- Helvetica
- Lucida Sans
- Tahoma

5. Writing your closing.

You should write closing part It not only looks good but also affect the person also.

- Yours sincerely
- Yours truly
- Yours
- Sincerely
- Best regards
- Best

6. Schedule your emails.

Send Emails at a specific time. You should know when will you get the respond immediately.

7. Do a final spelling and grammar check.

After writing Email,cross check your Email once.

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Here is an example of Email:

This is the window where you write your Email. To open this simply go to Gmail. Click on Compose on the left side.

Give the Recipient email and give a suitable subject related to your content. Start writing you Email. You can do formatting with options given n the bottom part.



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This is an example of Leave Application.



PRACTICAL 5

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

DESCRIBING 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, manufacturing/engineering, using and disposing of computing devices in a way that reduces their environmental impact.

The strategies of Green computing have decreased the consumption of overhead energy and have used the server maximum through a strategy including server virtualization. But technology trends, such as increase in data analytics and artificial intelligence, can reduce progress in green computing strategies.

Examples of Green Computing

- Renewable Energy Sources
- Renewable energy sources don't use fossil fuel.

They are available freely, are environmentally friendly and generate less pollution. 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 center.

At the most simple level, green computing is not a rocket science and certainly does not require large amounts of cash in case of up-front investment. As stated above, the active step for a green computing takes a little effort, yet low energy consumption usually changes to immediate savings.

Steps that we can take to contribute to green computing:

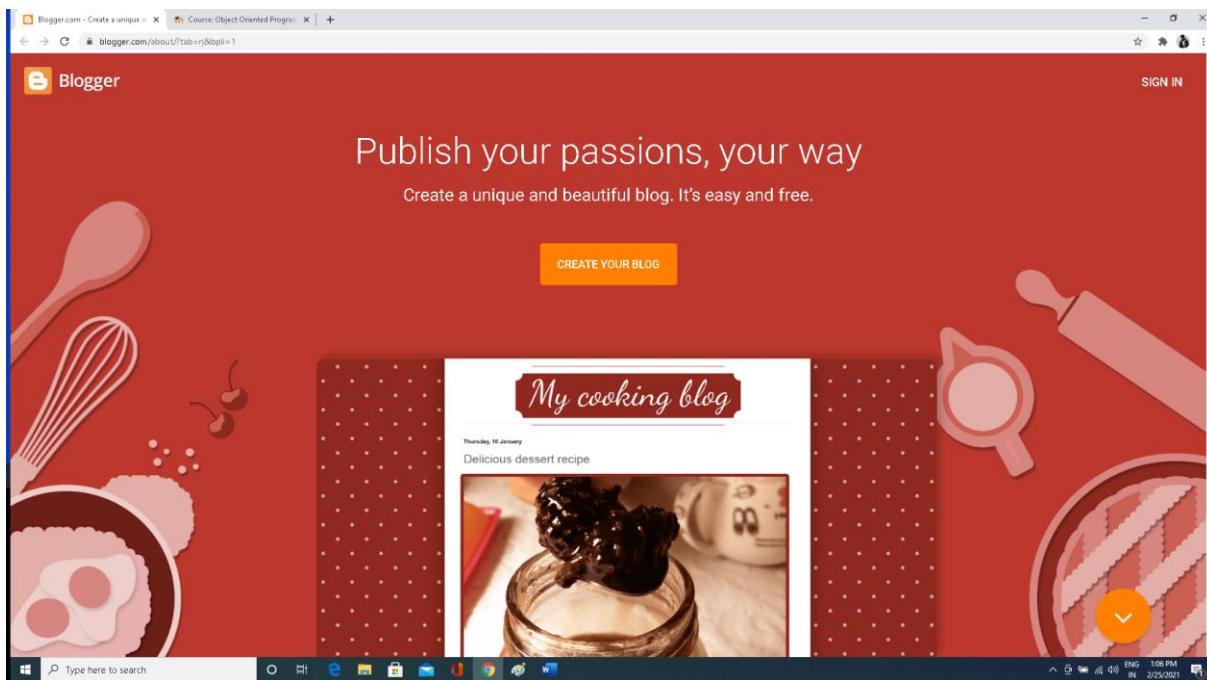
- 1) Power down when not in use seems simple but many of us leave computers powered up for a long time when not in use a large sum of power is being wasted, so if you're not using the computer press the power button to shut it off until needed. This can be done even if the computer is working on something. Screensavers do not save power. 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 to its current state when you need it again.
- 2) 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.
- 3) 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 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.
- 4) Use a laptop instead of desktop Laptops are much better for the environment than desktop computers as they have components which

require less power. If you don't need a desktop computer consider buying a laptop instead, or if you have both use the laptop as much as possible before considering the desktop.

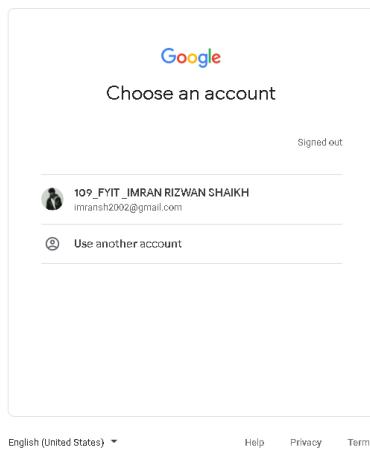
5) Recycle responsibly Computer hardware is filled with different material which can be hazardous to the environment so make sure you dispose of old components effectively. Don't just throw broken technology in the bin, take the time to trace local recycling organizations. There should be companies which 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 6
WRITING BLOGS**

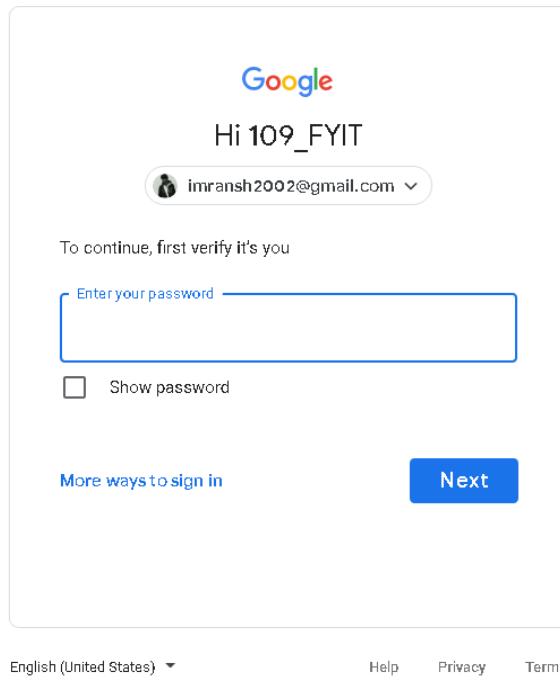
1. Open blogger.com website.



2. Choose an account for doing further process.



3. After choosing account, set a password



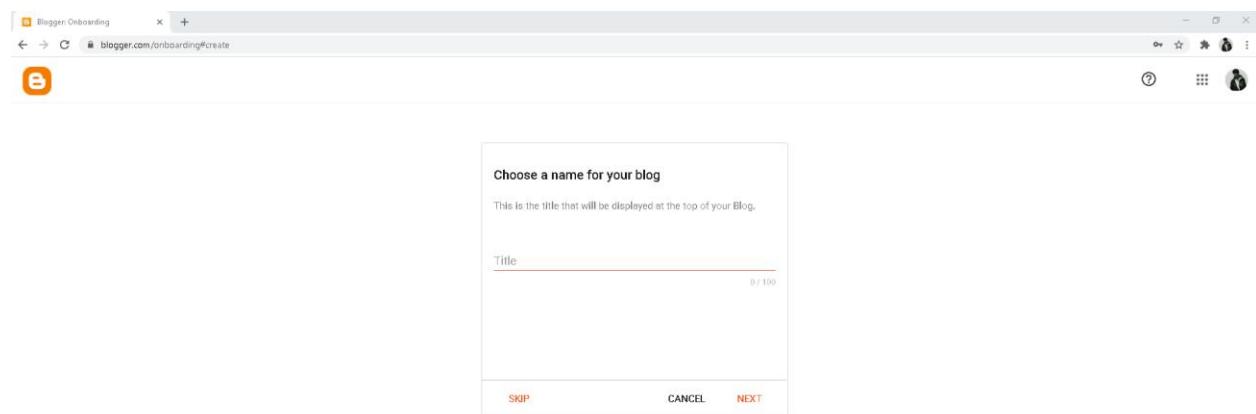
English (United States) ▾

Help

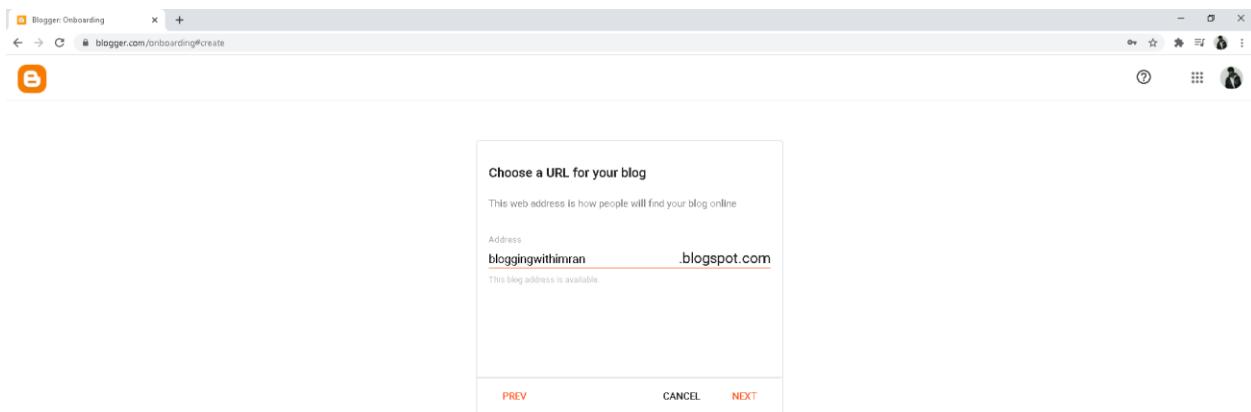
Privacy

Terms

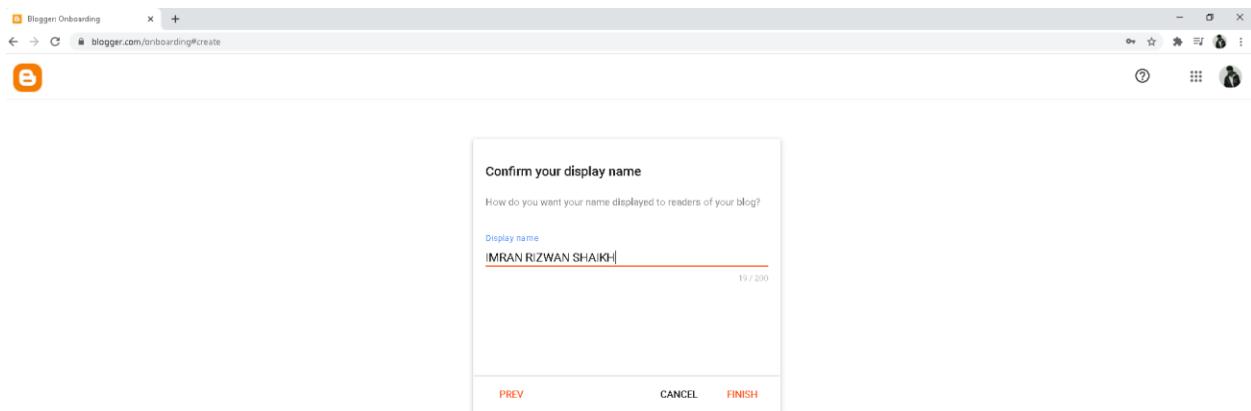
4. Write a name for your blog.



5. Write a url from which anyone can see your blog through that link.

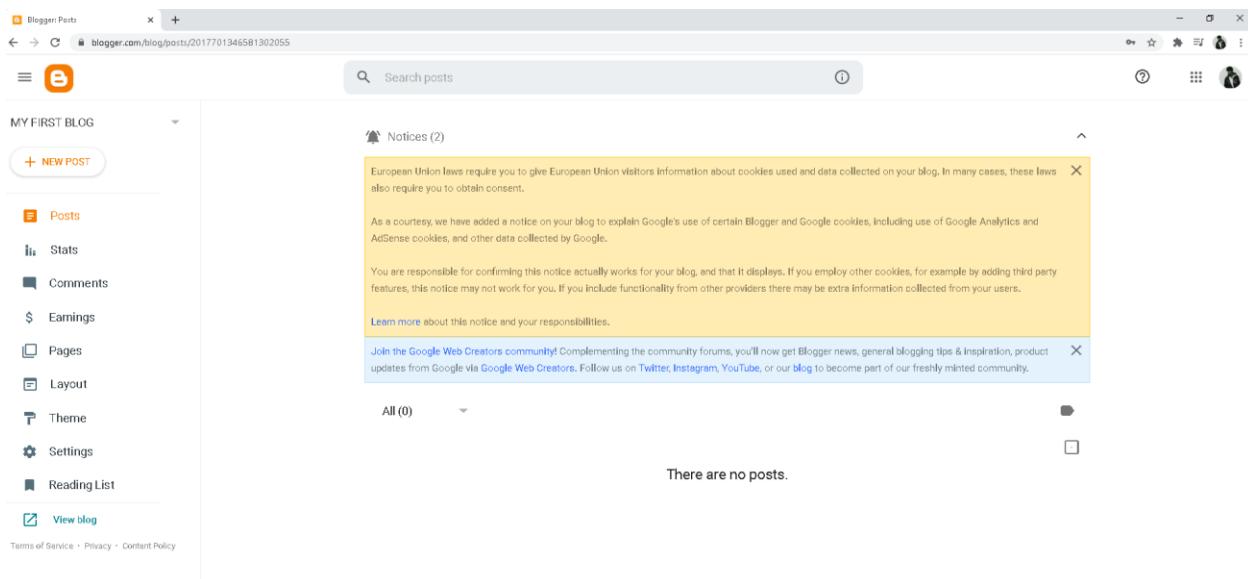


6. Confirm your url.

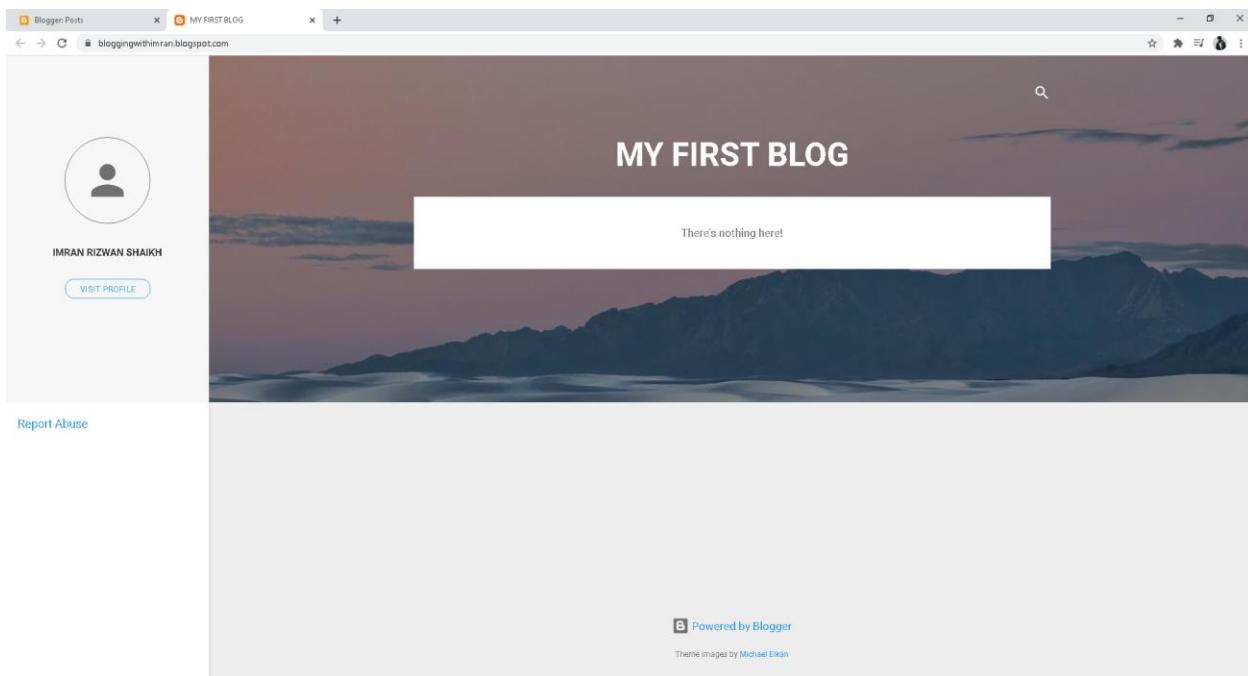


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7. This page will open when all process will complete. From here you can start creating your wonderful blog.



8. You can also see preview that how your blog looks like.



IMRAN RIZWAN SHAIKH 109 FYIT PRACTICAL 6 IT TOOLS

9. Example of blog.

The screenshot shows a blog post titled "MY AMAZING EXPERIENCE IN AZAMGARH" by "IMRAN RIZWAN SHAIKH". The post is dated March 16, 2021. The content includes an introduction about the author's experience in Azamgarh, mentioning his grandfather's brother living there and his visit to the village. It also discusses the winter season being the best for visiting the village. The post concludes with a statement about the climate being humid with large seasonal variations and extremely hot summers. A photograph of a traditional hut in a green field is included at the bottom of the post.

EXPERIENCE IN AZAMGARH

- March 16, 2021

MY AMAZING EXPERIENCE IN AZAMGARH

INTRODUCTION

Azamgarh is a city in the Indian state of Uttar Pradesh. It is the headquarters of Azamgarh division, which consists of Ballia, Mau and Azamgarh districts. Azamgarh is situated on the bank of Tamsa River. It is located 268 km east of the state capital Lucknow. In Azamgarh I live in Jairajpur. My Grandfather's brother stays there. The Amazing part is that in 18 years, I visited my village first time in my life. And the experience which I had, I can't explain in words.

My friends always says that "The Winter season is the best season to visit village" and my luck supports me, but till few days. 😊

and my luck supports me, but till few days. 😊
I spent a very good time in my Village.
First I would like to tell you about the Climate.

CLIMATE

Azamgarh experiences a Humid Climate with large variations between summer and winter temperatures. Summers are long, from early April to October following monsoon seasons, and are also extremely hot, even by South Asian standards. The temperature ranges between 22 and 46 °C the summers.

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CLIMATE

WINTER IN AZAMGARH(MY FAVOURITE)

Winters in Azamgarh see very large variations, with warm days and downright cold nights. Cold waves from the Himalaya region cause temperatures to dip across the city in the winter from December to February and temperatures below 5 °C are not uncommon. The average annual rainfall is 1,110 mm . Fog is common in the winters, while hot dry winds, called loo, blow in the summers. Recent years, the water level of the Tamsa has decreased significantly.



Activate Webcam
Go to Settings > Camera > Webcam

WINTER

NATURE'S BEAUTY IN VILLAGE

One of the best pics which I had clicked by my own



LAKE VIEW

I still remember the moment which I had spent at these place.



Activate Webcam
Go to Settings > Camera > Webcam

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Activate Webcam
Go to Settings > Webcam Scenery



Scenery:



GREENERY



Activate Webcam
Go to Settings > Webcam Scenery

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Whenever I saw these pics I wish that I could go in the past and enjoy that moment again ❤️

Now I will share my cooking mania with you

FOOD

DISHES: The famous dish which usually people love to eat in winter is 'TAHDI'.



TAHDI

Another most popular dish is 'GUJIYA'. All my family member love to eat Gujiya except me! 😅 It is made up of mutton or chicken and with rice wheat. The different in this is the women uses warm water for making a dough of it. Due to this it become soft and tasty. And it is prepare on steam.



Activate VoiceSearch
Go to Settings > Google > Google Assistant



GUJIYA

Now let's talk about some SWEET.

First come first: PEDA ❤️ I really love this Peda. This is one of my Favourite sweet ever. I took a one box of this when I was returning home. And even I never allow anyone to touch it or eat it.



Activate VoiceSearch
Go to Settings > Google > Google Assistant

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MY FAVOURITE PEDA

Second: KHAJA. Actually KHAJA is the sweet which is famous more than my Peda but I love Peda more and whenever I saw Peda I say " Imran Khaja" 😊

But really KHAJA is also nice. Yeah it's true that I haven't ate it but it is tasty!



KHAJA

The thing which come next in this list is 'RASIO'. Actually I didn't eat this but it looks nice. It is made up with 'Sugarcane juice' and 'New Rice'. The Rice should be New means the newly grown Rice.



Activate Webcam
Go to Settings > Camera > Webcam



RASIO

The last but not the least is 'DOODHI KA HALWA'. It usually found in 'Mubarakpur'. The 'Mubarakpur ka Halwa' is very tasty. I have taste it and after my Peda, halwa takes a place.



DOODHI KA HALWA

Now let's do fun with Juices.
The famous Juice and the famous tea in Azamgarh is made up of 'GUDH'.



Activate Webcam
Go to Settings > Camera > Webcam

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GUDH

I have drink a 'Gudh ki chai'. In village they usually use Gudh instead of Sugar for making a tea. And believe me it was just Amazing. I'll give you one advice: If you haven't try 'GUDH KI CHAI', just try it once.

The last thing is about Fruit which is famous in Azamgarh:
SINGADHA



SINGADHA

The funniest thing about the whole vacation is 'When I was returning from Village, I was holding a BIG SACK which is full of Singadha. And the same thing my whole family eat that, but I don't. People eat this in two ways first without boiling and second after boiling.'

HOUSE

Now I would like to share my House pic with you all as It is one of my Favourite house:



Activate Webcam
Go to Settings > Webcam

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This is the place where I spend the most wonderful time.

GREENERY

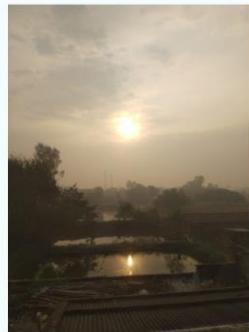
Here is some pics of GREENERY of AZAMGARH



Activate Webcam
Go to Settings > Camera > Webcam



*The most memorable scene:
THE SUNRISE*



SUNRISE

Activate Webcam
Go to Settings > Camera > Webcam

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SUNRISE

And do you know the wonderful part of Winter season in village: 'At 5 pm only, the sun sets completely and the night start. Just imagine the scene its only 5 and the surrounding wears the black coats! with small white buttons'.

I Never Expected From Any Village That A Village Trip Gone Such Amazing Trip Ever. This Trip was teach me that winter is not only a season its a Celebration.

*The best thing which I learn from this village trip is:
Winter will be sometime dangerous. 😊*

The one quote which is suitable for winter in village is:

*I Can't get off my bed on days
when temperature is less than my Age. 😊😊*

IF YOU LIKE THIS PLEASE LEAVE A COMMENT

AS ITS FREE!! 😊



Location: Jairajpur, Uttar Pradesh, India

Activate Windows
Go to Settings > Update & Security > Windows Update

PRACTICAL 7

Implementing coding practices in Python using PEP8.

As Guido van Rossum said, “Code is read much more often than it is written.” You may spend a few minutes, or a whole day, writing a piece of code to process user authentication. Once you’ve written it, you’re never going to write it again. But you’ll definitely have to read it again. That piece of code might remain part of a project you’re working on. Every time you go back to that file, you’ll have to remember what that code does and why you wrote it, so readability matters.

PEP stands for Python Enhancement Proposal, and there are several of them. A PEP is a document that describes new features proposed for Python and documents aspects of Python, like design and style, for the community.

Writing clear, readable code shows professionalism. It’ll tell an employer that you understand how to structure your code well.

If you have more experience writing Python code, then you may need to collaborate with others. Writing readable code here is crucial. Other people, who may have never met you or seen your coding style before, will have to read and understand your code. Having guidelines that you follow and recognize will make it easier for others to read your code.

Coding using PEP 8:

```
prac7.py - F:/CLG/IT TOOLS/Practical/7/prac7.py (3.9.2)
File Edit Format Run Options Window Help
# Correct:
# Add 4 spaces (an extra level of indentation) to distinguish arguments from the rest.
def long_function_name(
    var_one, var_two, var_three,
    var_four):
    print(var_one)

# Hanging indents should add a level.
foo = long_function_name(
    "IT Tools", "OOP",
    "WP", "PP")

# Aligned with opening delimiter.
foo = long_function_name("IT Tools", "OOP",
    "WP", "PP")
|
```

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window He
Python 3.9.2 (tags/v3.
D64) ] on win32
Type "help", "copyright"
>>>
===== REST
IT Tools
IT Tools
>>> |
```

Another Example:

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```
prac7_2.py - F:/CLG/IT TOOLS/Practical/7/prac7_2.py (3.9.2)
File Edit Format Run Options Window Help
# This program adds two numbers

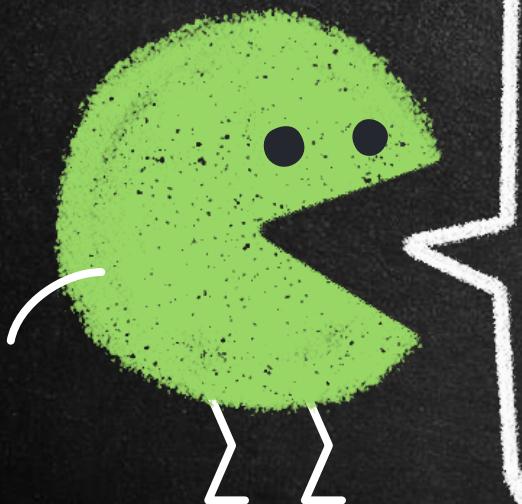
num1 = 1.5
num2 = 6.3

# Add two numbers
sum = num1 + num2

# Display the sum
print('The sum of {0} and {1} is {2}'.format(num1, num2, sum))
```

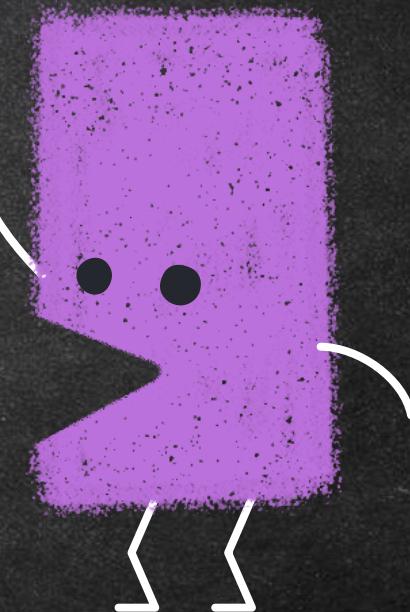
```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19
D64) ] on win32
Type "help", "copyright", "credits" or "l
>>>
===== RESTART: F:/CLG/IT TOOLS
The sum of 1.5 and 6.3 is 7.8
>>> |
```

ENERGY MANAGEMENT TECHNIQUE IN HARD DISK



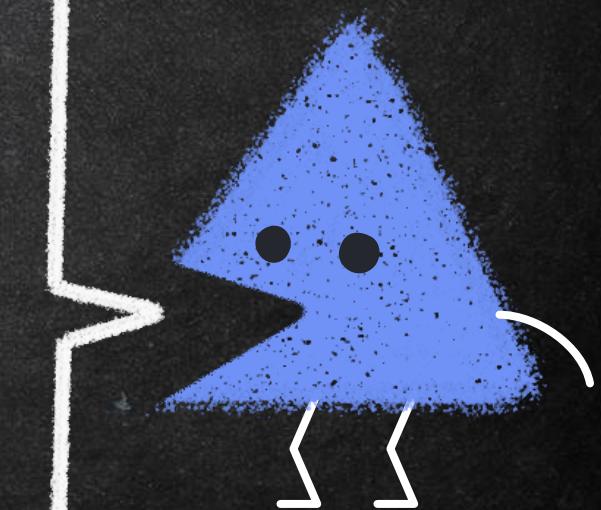
“

→ “Energy efficiency is not just about saving energy, it’s about tackling economic, environmental and social issues at the same time.”



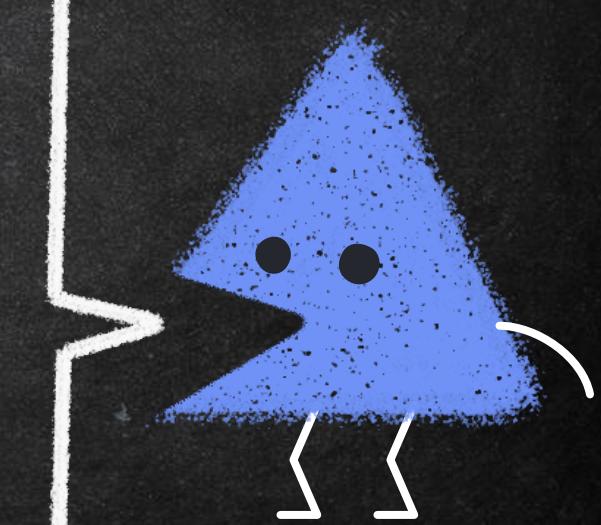
WHAT IS ENERGY MANAGEMENT?

- Energy management is a set of features that help reduce **power** consumption by placing monitors and **computers** into a **low-power** "sleep mode" after a period of activity. Simply touching the mouse or keyboard "wakes" the **computer** and monitor in seconds
- To reduce the energy consumption of hard disks, different techniques and methodologies are being adopted.



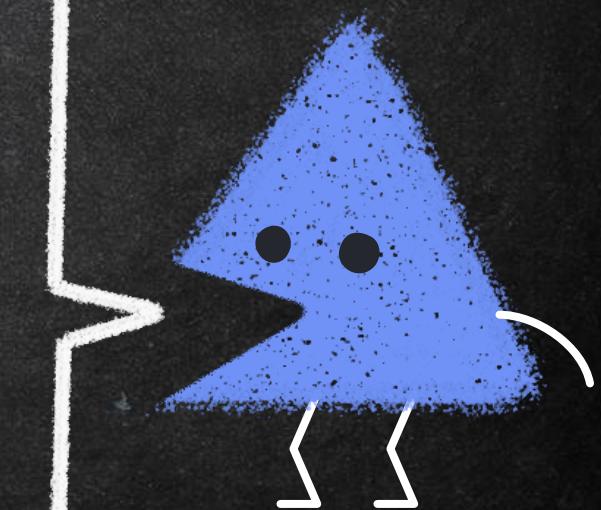
OBJECTIVES:

- The objective of the energy management is to achieve and maintain optimum energy procurement and utilization , throughout the organization.
- Main objectives are:
 - I. To minimize energy cost
 - II. Increase efficiency
 - III. Reduce carbon emission
 - IV. Find superior energy alternatives.



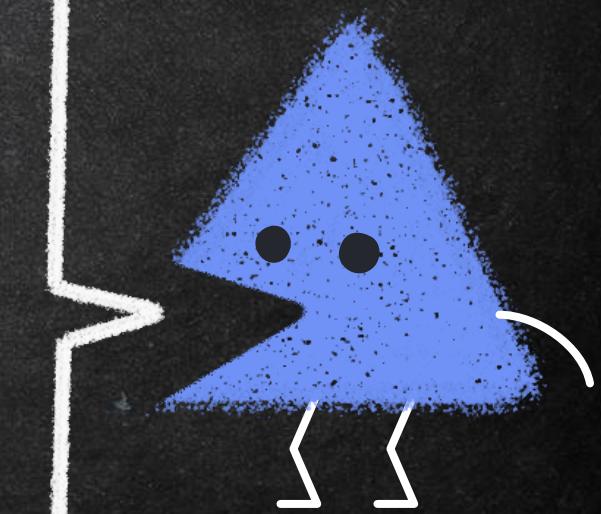
DIFFERENT WAY FOR ENERGY MANAGEMENT:

- ✓ **State transitioning**
- ✓ **Caching**
- ✓ **Dynamic RPM**
- ✓ **Data centers and associated energy challenges**
- ✓ **Taking your progress at energy saving**

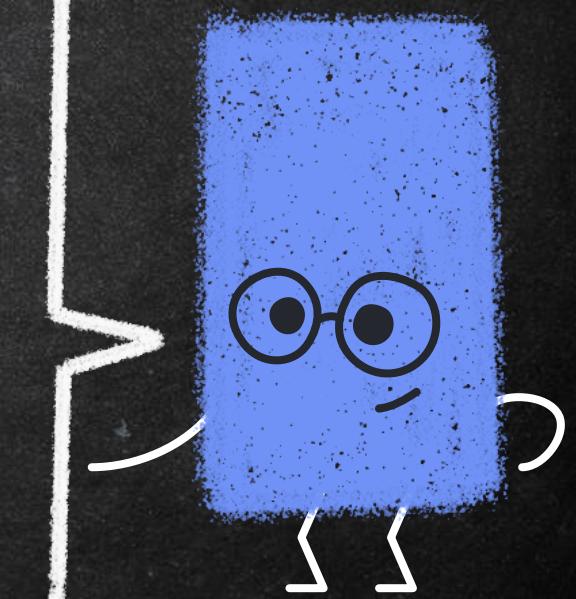


State Transitioning :

- Given that in a hard disk, the spindle motor consumes most of the power, state-transitioning techniques try to turn off the spindle motor or keep it in standby mode during idle periods.
- The disk transitions to standby or off mode if there is no request to be served.
- If the disk is already idled for the threshold time, it transitions to standby mode. If it stays in standby mode for another threshold of time without requests, it can further transition to off mode. In this approach, the historical information is used to predict the future access pattern.

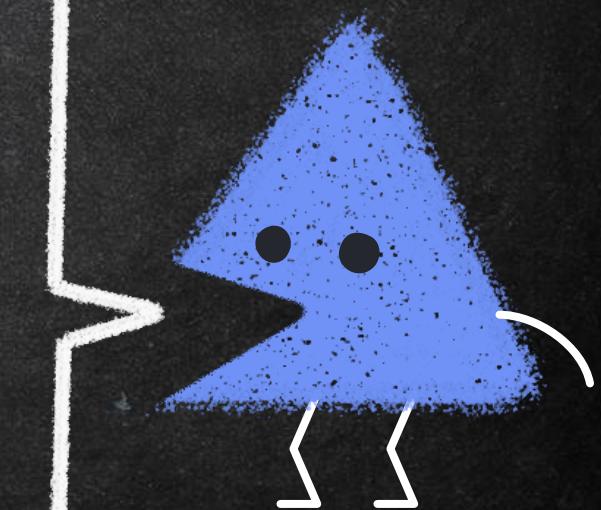


- ✓ Most on-going research and development in state transitioning revolve around idle period prediction and minimizing the performance impact of these transitions on disk responsiveness (as the transition time is usually around 8-10 seconds).
- ✓ Some state-transitioning techniques provide a performance guarantee.

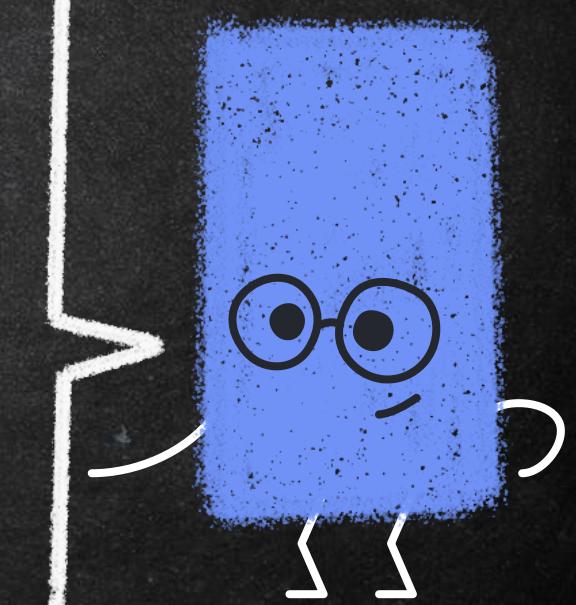


Caching:

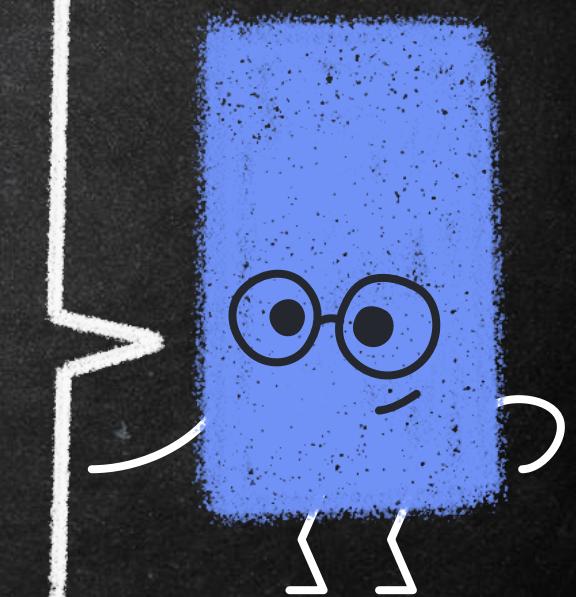
- In order to speed up access for both read and write requests, enterprise storage solutions typically have huge amounts of cache in conjunction with regular disks
- To make use of the cache to aid in disk power management, various techniques are recommended.
- These cache management techniques or algorithms aim to minimize disk power usage, either by minimizing disk access or by increasing the length of idle periods.



- One could in effect use huge caches to increase the idle periods of disks and in doing so can help more disks to transition to the sleep state, thereby improving energy efficiency.
- The cache management algorithms partition-aware least recently used and partition-based LRU are centred on this idea. PALRU classifies all disks based on access patterns into two classes - priority (disks with fewer cold misses and longer idle times) and regular - and maintains two separate LRU queues. At the time of an eviction decision, first the regular queue elements are chosen as victims. If the regular queue is empty, the algorithm chooses elements from the priority queue. PBLRU, however, differentiates between disks by dynamically varying the number of allocated cache blocks per disk. It divides the cache into multiple partitions (one per disk) and adjusts the size of these partitions periodically based on workload characteristics.

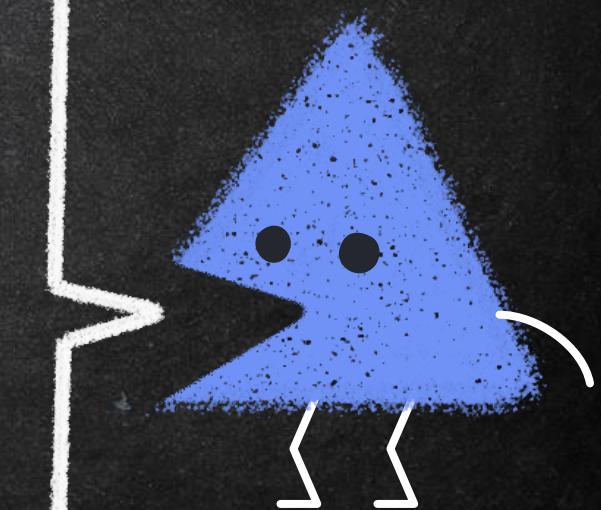


- ✓ Since write requests in enterprise storage devices almost never get written directly to target disks (they are cached instead), another technique is to use write offloading as a mechanism to conserve disk power usage.
- ✓ Write offloading facilitates complete spin downs of volumes periodically, thereby aiding in significant power savings. By using write offloading, about 45-60% energy savings can be achieved in write-dominated application environments.

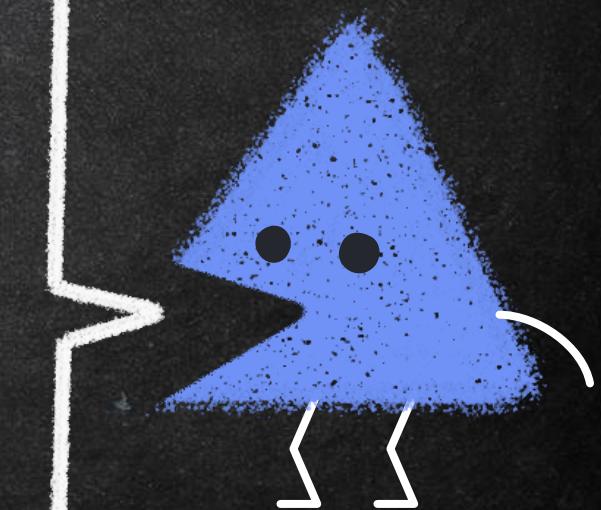


Dynamic RPM:

- ❑ Dynamic RPM in which the rotation speed of a hard disk is varied based on workload is another technique for hard disk energy management
- ❑ It assumes availability of multispeed hard disks, and power consumption increases with the speed of rotation.
- ❑ In dynamic RPM, the rotational speed of the disk is altered based on the desired response time of disks and the performance requirement. A fast response time that is greater than the specified or expected threshold is a waste of performance.

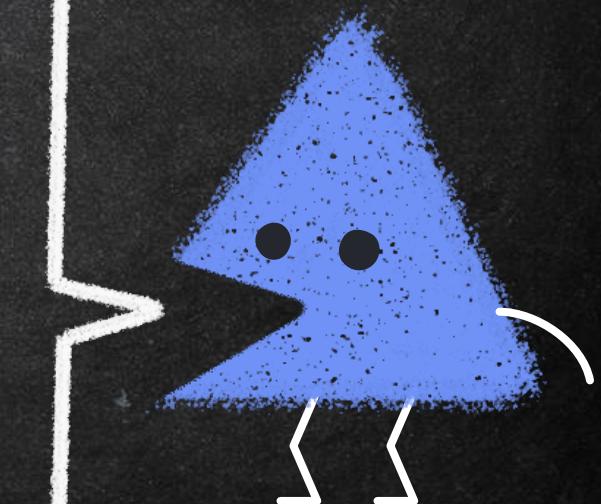


- The idea here is to limit this wastage of performance by switching the rotational velocity of the disk to a lower value that still yields acceptable performance.
- Practical implementation of this approach is limited by the feasibility of developing a single disk that can change speeds in a cost-effective manner, but simulation results reveal that a dynamic RPM scheme can yield a power savings of up to 60%.



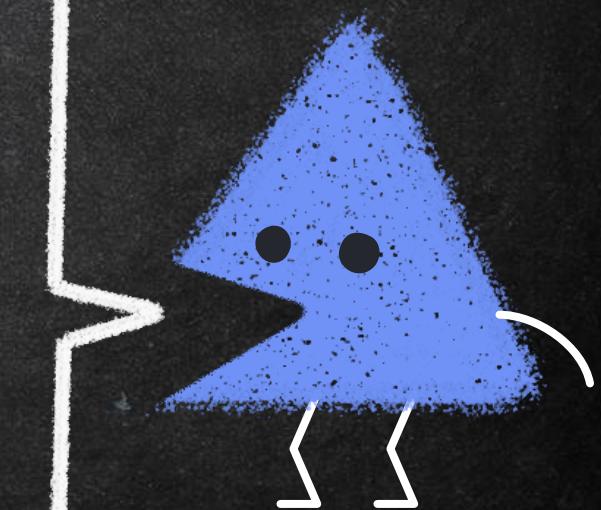
Taking your progress at energy saving:

- ✓ Disconnect your external devices.
- ✓ Use a smart strip, especially for **computers** you cannot turn off.
- ✓ Adjust your **computer's energy** settings.
- ✓ Shutdown and unplug your **computer** when not in use.
- ✓ Use a charger only when charging your laptop.
- ✓ Should you be in the market for a new PC, choose one that's **Energy** Star compliant.
- ✓ *Adjust your computer's energy settings*

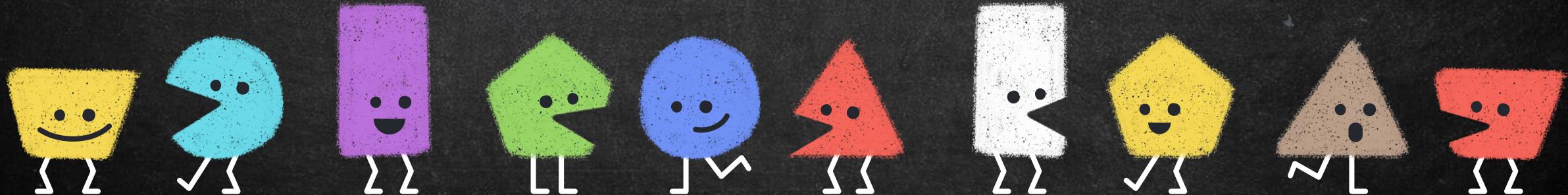


ADVANTAGES OF ENERGY MANAGEMENT:

- **Control power supply**
- Reduce **costs**. If anything, an EMS allows you to significantly reduce utility **costs** across the board, including heating, cooling, lighting, and water.
- **Making informed decisions**
- **Detecting power quality problems**
- **Remote access**



NAMES:	ROLL NO
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TUSHAR JANI	27
RISHI MISTRY	46
ARIF SHAIKH	80
FARAHAN SIDDIQUI	87
IMRAN RIZWAN SHAIKH	109



THANKYOU

