



**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. Roshan Rajdev Maurya

Roll No: 40

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.	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.	18/03/2021	PRESENTATION:	

PRACTICAL 1

INTRODUCTION AND CONTRIBUTION TO WIKIPEDIA.

A] Description about Wikipedia and its features.

Description is the pattern of narrative development that aims to make vivid a place, object, character, or group. Description is one of four rhetorical modes (also known as modes of discourse), along with exposition, argumentation, and narration. In practice it would be difficult to write literature that drew on just one of the four basic modes.

Jimmy Wales and 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.

Criticisms of Wikipedia include assertions that its openness makes it unreliable and unauthoritative. Because articles don't include bylines, authors aren't publicly accountable for what they write. Similarly, because anyone can edit any article, the site's entries are vulnerable to unscrupulous edits. In August 2007, Virgil Griffiths created a site, [WikiScanner](#), where users could track the sources of edits to Wikipedia entries. Griffiths reported that self-serving edits typically involved whitewashing or removal of criticism of a person or organization or, conversely, insertion of negative comments into the entry about a competitor. Wikipedia depends upon the vigilance of editors to find and reverse such changes to content.

In addition to the encyclopedia, the non-profit Wikipedia foundation oversees several other open-content projects, including:

- Wiktionary, a dictionary and thesaurus
- Wikibooks, a collection of free texts and other books
- Wikiquote, a collection of quotations
- Wikisource, a collection of free source documents
- Wikiversity, a collection of free learning materials
- Wikispecies, a directory of species
- Meta-Wiki, which coordinates all the other projects.

Wikipedia was one of the first social media websites.

B] Creating Account on Wikipedia.

➤ Step 1:



➤ Step 2:

The screenshot shows the Wikipedia mobile homepage. At the top, there's a navigation bar with "Main Page" and "Talk" tabs, along with "Read", "View source", and "View history" links. A search bar says "Search Wikipedia". On the left, the Wikipedia logo and a sidebar with links like "Main page", "Contents", and "Contribute" are visible. The main content area features a "Welcome to Wikipedia" message, a "From today's featured article" section with a painting of a battle scene, and a "In the news" section with a photo of Carlos Menem.

➤ Step 3:

Fill all required data.(Username, Password, Email Id,)and type the captcha and click CREATE YOUR ACOOUNT.

The screenshot shows the account creation form on en.wikipedia.org. It includes fields for "Username" (Roshan R Maurya), "Password" (*****), "Confirm password" (*****), and "Email address (optional)" (roshammaurya120@gmail.com). Below these, a note says "To protect the wiki against automated account creation, we kindly ask you to enter the words that appear below in the box (more info)". A CAPTCHA box contains the text "criessiege" and a text input field where "criessieg" is typed. A "Create your account" button is at the bottom.

Username	(help me choose)
Roshan R Maurya	
Password	*****
It is recommended to use a unique password that you are not using on any other website.	
Confirm password	*****
Email address (optional)	
roshammaurya120@gmail.com	
To protect the wiki against automated account creation, we kindly ask you to enter the words that appear below in the box (more info):	
CAPTCHA Security check	
criessieg	
Can't see the image? Request an account	
Create your account	

➤ Your Account is Created

15:14 0.08 kb/s 4G 58

WIKIPEDIA Search Wikipedia

Welcome, Roshan R Maurya!

Welcome to Wikipedia,
the free encyclopedia that anyone can edit.
6,249,676 articles in English

From today's featured article

 The Silesian Wars were a series of three wars fought between Prussia (under King Frederick the Great) and Austria (under Archduchess Maria Theresa) for control of the Central European region of Silesia (now in south-west Poland). The

- The arts
- History
- Biography
- Mathematics
- Geography
- Science
- Society
- Technology
- All portals

In the news

- Former President of Argentina Carlos Menem (pictured) dies at the age of 90.
- Former President Donald Trump



➤ Creating your page on Wikipedia.

1) Search Your Name

15:11 0.00 kb/s 4G 58

Roshan R Maurya Talk Preferences Beta Watchlist Contributions Log out

Main Page Talk Read View source View history Search Wikipedia

Welcome to Wikipedia,

the free encyclopedia that anyone can edit.
6,249,676 articles in English

From today's featured article

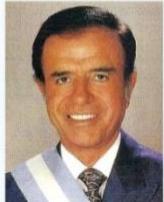
 Prussian grenadiers overrunning Saxon forces during the Battle of Hohenfriedberg

The Silesian Wars were a series of three wars fought between Prussia (under King Frederick the Great) and Austria (under Archduchess Maria Theresa) for control of the Central European region of Silesia (now in south-west Poland). The

- The arts
- History
- Biography
- Mathematics
- li>• Geography
- li>• Science
- Society
- Technology
- All portals

In the news

- Former President of Argentina Carlos Menem (pictured) dies at the age of 90.
- Former President Donald Trump is acquitted by the United States Senate in his second impeachment trial.



2)

contributing to Wikipedia.

- Articles should reflect only what reliable sources have said about the topic, and all articles need references to reliable sources.
- If you have a conflict of interest with the topic you are writing about, you should disclose it on the draft's talk page.
- If you are being paid to contribute to Wikipedia, you must—under the Wikimedia Foundation's terms of use—disclose who is paying you, who the client is, and any other relevant affiliation.
- If you have an idea for the title of an article, but no content for the article itself, you can make a suggestion at [Wikipedia:Requested articles](#).

Your article title will have "Draft:" in front of it until it is accepted as an article. To start a new draft, click the button below:

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

3)

The screenshot shows the English Wikipedia homepage. At the top, there is a dark header with a house icon, a lock icon, the URL 'en.wikipedia.org/wiki/Wiki...', a '20' badge, and an upward arrow icon. Below the header, the Wikipedia logo is visible. The main content area features a banner for 'Wikimeet India 2021!' with the text: 'Registration open for Wikimedia Wikimeet India 2021 until 16 February 2021! Main Event: February 19 - 21, 2021'. Below the banner, the text 'From Wikipedia, the free encyclopedia' is displayed. A 'Wikipedia Article Wizard' section follows, with a 'Welcome' message and a 'Next' button. At the bottom of the page, there is a blue button labeled 'Practice in your personal sandbox'.

4)

The screenshot shows a Wikipedia Article Wizard page. The left sidebar contains links like Main page, Content, Current events, Random article, About Wikipedia, Contact us, Donate, and various tools. The main content area is titled "From Wikipedia, the free encyclopedia" and "[< Wikipedia:Article wizard](#)". It features a section titled "Wikipedia Article Wizard" with a blue star icon and the sub-section "Referencing and notability". A note states: "Your article will be rejected if the topic is not notable, is not referenced properly, or violates copyright." Below this, there's a "Copyright" section with a note about not copy-pasting material from sources. The "Notability" section discusses how topics must be covered in reliable sources. The "Referencing" section lists rules for sources, mentioning independent and non-independent sources, and notes that blogs, social media, and tabloid journalism are generally unacceptable. A note says to use `<ref></ref>` for references, giving an example: "Bizco was founded in 1942." A link to a guide on citing different types of materials is provided. At the bottom, there are three buttons: "Next", "Common mistakes", and "Back".

5)

This screenshot shows the same Article Wizard page, but the main content area is now titled "Common mistakes". It starts with a note about common mistakes made with drafts, listing several types of mistakes:

- Writing about yourself or someone/something you're close to
- Whether it is yourself, a family member, a friend, an employer, a mentor/business partner, writing about topics close to you (and the people close to you) is discouraged as the article you will create may not be neutral.
- Copy-pasting material
- You must write the article in your own words, or it may be deleted.
- Not citing your sources

It continues with more points:

- Articles without independent reliable sources usually get deleted within days.
- Overly promotional language
- Terms like "leading expert" and "ground-breaking technology" sound great when promoting a product, but they do not belong on Wikipedia. Let the facts speak for themselves.

At the bottom, there are three buttons: "The point to edit", "The writing about myself, or a close person/people", and "I'm not connected to the subject".

6)

The screenshot shows a Wikipedia article page for 'Wikinews'. The top navigation bar includes a home icon, a padlock icon indicating a secure connection, the URL 'en.wikipedia.org/wiki/Wikinews', a '20' badge, and a red circular arrow icon. The main content area features the Wikipedia logo and the heading 'From Wikipedia, the free encyclopedia'. Below the heading is a link to 'Wikipedia:Article wizard'. The text discusses the importance of being transparent when having a relationship with a subject. It lists three ways to handle such conflicts: requesting an article, requesting edits, and staying transparent. The sidebar on the left contains links for Main page, Contents, Current events, Random article, About Wikipedia, Contact us, Donate, Contribute, Help, Learn to edit, Community portal, Recent changes, Upload file, Tools, What links here, Related changes, Special pages, Permanent link, Page information, Wikidata item, Print/export, Download as PDF, Portable version, Languages (Bosnian, Croatian / srpski, Tiếng Việt), and Edit links.

From Wikipedia, the free encyclopedia

< Wikipedia:Article wizard

Wikipedia Article Wizard

When having either a business or personal relationship with a subject there are a few things to keep in mind:

- You can request an article

It's improbable when having a conflict of interest to write in a way that doesn't favor the subject unduly. However, you can always request the article be written by someone else. This will prevent you from introducing an intrinsic bias into the article, since a neutral party will be writing the article.
- You can also request edits

Much like requesting a neutral party to make an article for you, you can also request another editor to make an edit on your behalf. More information on how to do so can be found [here](#).
- Stay transparent

Be open about your connection with the subject. There are many editors on Wikipedia, and it's likely you'll interact with them in some way. Being transparent is an integral step in having other editors help you with your article.

New

7) Type your page title in text box and click create new article.

The screenshot shows a Wikipedia Article Wizard page. At the top, there's a navigation bar with icons for home, search, and user profile, followed by the URL 'en.wikipedia.org/wiki/Wiki'. A notification badge '20' is visible. Below the bar, the Wikipedia logo and the word 'VIKIPEDIA' are displayed. The main content area has a header 'From Wikipedia, the free encyclopedia' and a backlink '< Wikipedia:Article wizard'. A sidebar on the left contains various links such as 'in page', 'recent events', 'idom article', 'out Wikipedia', 'inact us', 'date', 'tribute', 'p', 'at links here', 'stated changes', 'cial pages', 'manent link', 'e information', 'idata item', 'it/export', 'vload as PDF', 'itable version', 'guages', 'anski', 'srpski / srpski', 'ng Viêt', and 'Edit links'. The central text area starts with 'You're all ready to go! When you create your draft, not be seen by external search engines. However, v finish, you'll be able to submit it to be reviewed by volunteers. Reviews can take a long time, so please patient and rest assured that your draft will be revi due course. This may take 4 months or more, since are reviewed in no specific order.' Below this text is a text input field containing 'Roshan R Maurya' and a blue button labeled 'Create new article draft'.

8) Now you can type whatever you want to in your page.

The screenshot shows a web browser window with the URL en.wikipedia.org/w/index.php?title=Creating_Draft:Roshan_R_Maurya&action=edit. The page title is "Creating Draft:Roshan R Maurya". A message box states: "Wikipedia does not have a page with this exact title. To start a page called Draft:Roshan R Maurya, type in the box below. When you are done, preview the page to check for errors and then publish it." Below the message, it says "Find sources: Google (books · news · newspapers · scholar · free images · WP refs) · FENS · JSTOR · NYT · TWL". The main content area contains the following text:

Myself Roshan R Maurya
I am 18 years old
I Studying in FYBSC IT in Nagindas
Khandwala College
Living in Kandivali East Mumbai 400101.

The browser interface includes a navigation bar with a house icon, a lock icon, a "20" icon, and a three-dot menu icon. On the left, there's a sidebar with links like Main page, Contents, Current events, Random article, About Wikipedia, Contact us, Donate, Contribute, Help, Learn to edit, Community portal, Recent changes, Upload file, Tools, What links here, Special pages, Page information, and Languages.

9) Your Page is Created

The screenshot shows a Wikipedia draft page for 'Draft:Roshan R Maurya'. The page content is as follows:

From Wikipedia, the free encyclopedia

Myself Roshan R Maurya I am 18 years old I
Studying in FYBSC IT in Nagindas
Khandwala College Living in Kandivali East
Mumbai 400101.

This page was last edited on 15 February 2021, at 10:11.

Text is available under the [Creative Commons Attribution-ShareAlike License](#); additional terms may apply. By using this site, you agree to the [Terms of Use](#) and [Privacy Policy](#). Wikipedia® is a registered trademark of the [Wikimedia Foundation, Inc.](#), a non-profit organization.

Navigation links on the left include: Main page, Contents, Current events, Random article, About Wikipedia, Contact us, Donate, Contribute, Help, Learn to edit, Community portal, Recent changes, Upload file, Tools, What links here, Related changes, Special pages, Permanent link, Page information, Print/export, Download as PDF, Printable version, Languages.

Page footer links: Privacy policy, About Wikipedia, Disclaimers, Contact Wikipedia, Mobile view, Developers, Statistics, Cookie statement, Wikimedia project, MediaWiki.

D] Editing Your Page:

1) Click Edit Source

The screenshot shows a Wikipedia edit page for a draft entry. The title is "Draft:Roshan R Maurya". The content area contains the following text:

From Wikipedia, the free encyclopedia

Myself Roshan R Maurya I am 18 years old I
Studying in FYBSC IT in Nagindas
Khandwala College Living in Kandivali East
Mumbai 400101.

Text is available under the [Creative Commons Attribution-ShareAlike License](#); additional terms may apply. By using this site, you agree to the [Terms of Use](#) and [Privacy Policy](#). Wikipedia® is a registered trademark of the [Wikimedia Foundation, Inc.](#), a non-profit organization.

At the bottom, there are links for "Privacy policy", "About Wikipedia", "Disclaimers", "Contact Wikipedia", "Mobile view", "Developers", "Statistics", and "Cookie statement". Logos for Wikimedia and MediaWiki are also present.

2) Edit Your Information:, and fill Summary box,after editing Click Publish Page.

The screenshot shows a Wikipedia edit page for a user's bio. The bio text is:

Myself Roshan R Maurya
I am 18 years old
I Studying in FYBSC IT in Nagindas
Khandwala College
Living in Kandivali East Mumbai 400101.
In My Family there are four members
including me.

Below the text is a toolbar with various editing icons. At the bottom of the page is a "Edit summary" box containing the placeholder "Just for practical purpose". Below the summary box is a "By publishing changes, you agree to the Terms of Use, and you irrevocably agree to release your contribution under the CC BY-SA 3.0 License and the GFDL. You agree that a hyperlink or URL is sufficient attribution under the Creative Commons license." A "Publish changes" button is visible at the bottom left.

3)Your Page is Edited.

The screenshot shows a Wikipedia draft page for "Draft:Roshan R Maurya". The page content is as follows:

From Wikipedia, the free encyclopedia

Myself Roshan R Maurya I am 18 years old I
Studying in FYBSC IT in Nagindas
Khandwala College Living in Kandivali East
Mumbai 400101. In My Family there are four
members including me.

This page was last edited on 15 February 2021, at 10:13.

Text is available under the [Creative Commons Attribution-ShareAlike License](#); additional terms may apply. By using this site, you agree to the [Terms of Use](#) and [Privacy Policy](#). Wikipedia® is a registered trademark of the [Wikimedia Foundation, Inc.](#), a non-profit organization.

Navigation links include: Main page, Contents, Current events, Random article, About Wikipedia, Contact us, Donate, Contribute, Help, Learn to edit, Community portal, Recent changes, Upload file, Tools, What links here, Related changes, Special pages, Permanent link, Page information, Print/export, Download as PDF, Printable version, Languages.

Page footer links: Privacy policy, About Wikipedia, Disclaimers, Contact Wikipedia, Mobile view, Developers, Statistics, Cookie statement.

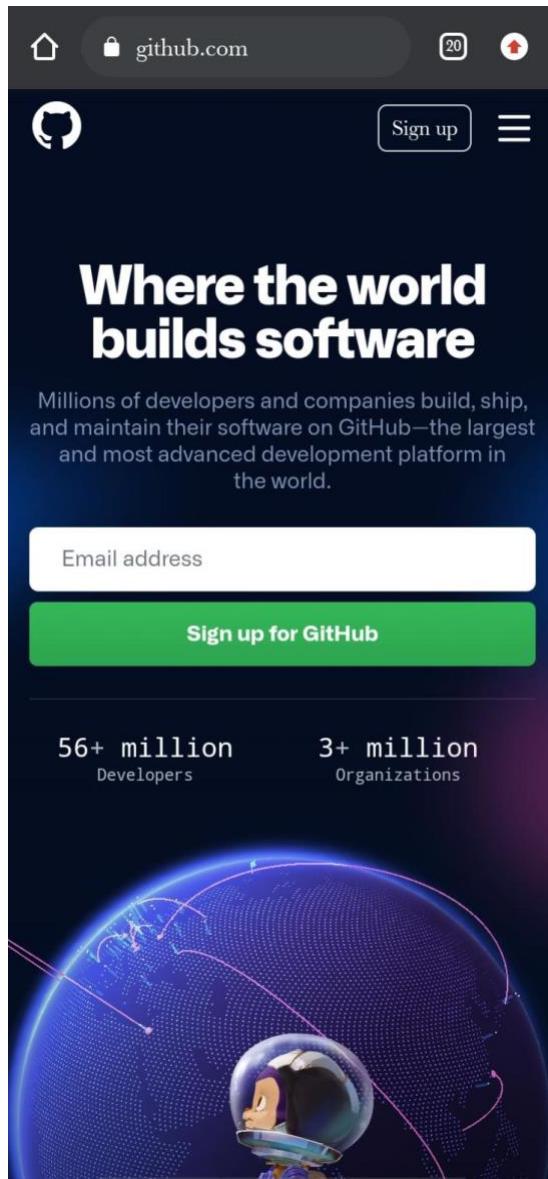
Logos for Wikimedia projects and MediaWiki are visible in the footer.

Practical 2

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

A] Creating Account:

1) Click on Sign Up



2) Fill all the Username, Emailid, password, verify the img and then click on create account.

Join GitHub

Username *

Email address *

Password *

Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter. [Learn more](#).

Email preferences

Send me occasional product updates, announcements, and offers.

Verify your account



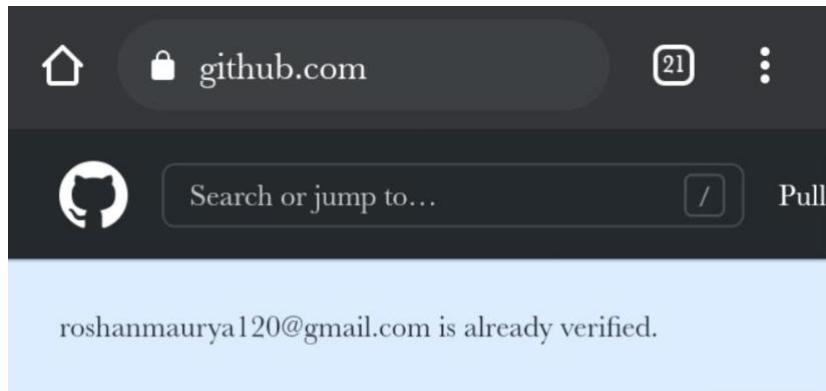
[Create account](#)

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 emails.

Account Created Successful

B] Creating Repository:

1) In the upper right corner, Click repository.



Working with a team?

GitHub is built for collaboration. Set up an organization to improve the way your team works together, and get access to more features.

[Create an organization](#)

2) Name your repository. Select Initialize this repository with a README, and Click create repository.

Create a new repository

A repository contains all project files, including the revision history. Already have a project or repository?

Owner * Repository name *

 RoshanMaurya /  IT-Tools

Great repository names are short and descriptive. Need inspiration? How about specific names like "my-new-project" or "awesome-project"?

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](#).

License: Apache License 2.0 ▾

This will set  main as the default branch. Change the default name in your [settings](#).

Create repository

3) Repository Created.

The screenshot shows a GitHub repository page for the user 'RoshanMaurya' with the repository name 'IT-Tools'. The page has a light green header with the text 'Learn Git and GitHub without any code!' and a 'Read the guide' button. Below the header, the repository details are shown: 'Code' tab is active, showing 'main' branch, 'Issues' (0), 'Pull requests' (1), 'Actions' (0), 'Projects' (0), 'Wiki' (0), 'Security' (0), and 'Insights' (0). The repository contains three files: 'LICENSE' (Initial commit, now), 'README.md' (Initial commit, now), and 'README.md' (now). On the right side, there are sections for 'About' (No description provided), 'Readme' (Readme), 'Apache-2.0' (Apache-2.0), 'Releases' (No releases published, Create a new rel), and 'Packages' (No packages published, Publish your first package). At the bottom, there is a footer with links to GitHub's terms, privacy, security, status, and documentation, as well as contact information and a blog link.

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

RoshanMaurya / IT-Tools

Code Issues Pull requests Actions Projects Wiki Security Insights

main Go to file Add file Code About

RoshanMaurya Initial commit now 1

LICENSE Initial commit now

README.md Initial commit now

README.md

🔗 IT-Tools

About

No description provided.

Readme

Apache-2.0

Releases

No releases published. Create a new rel

Packages

No packages published. Publish your first package

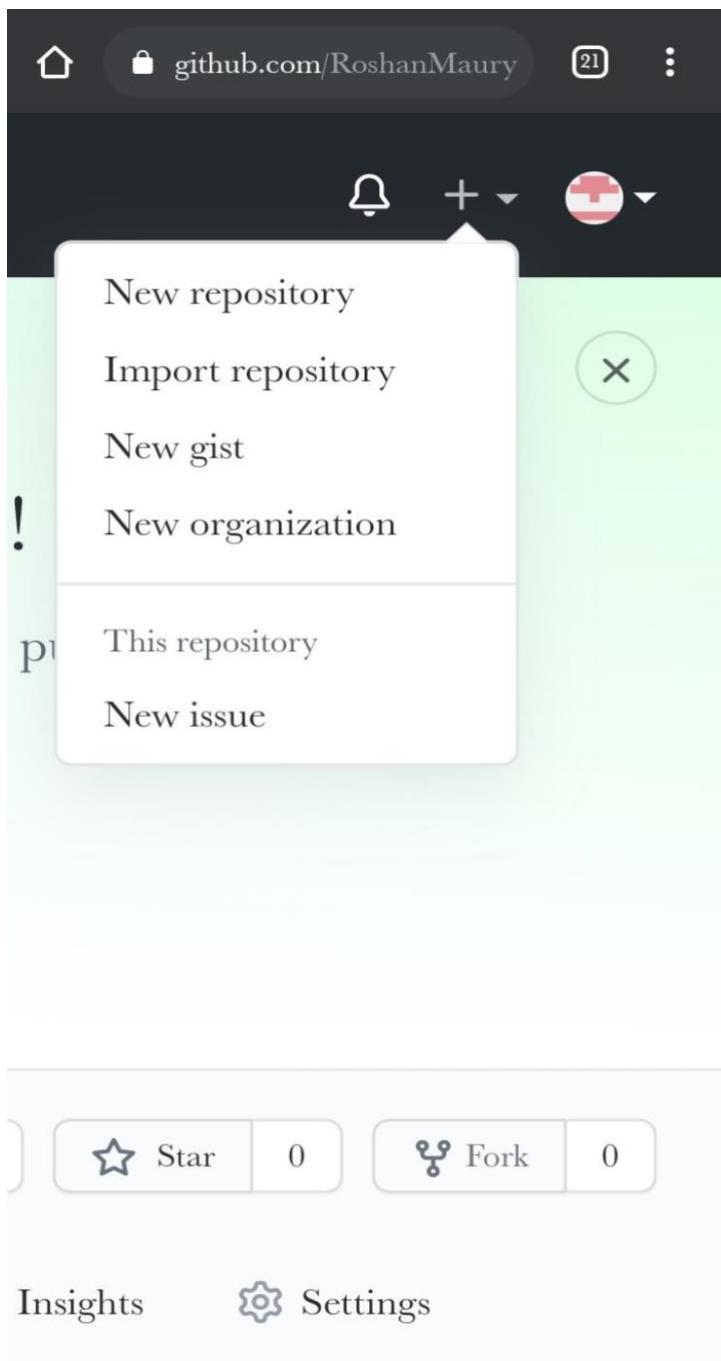
© 2021 GitHub, Inc. Terms Privacy Security Status Docs
Contact GitHub Pricing API Training Blog About

C] Cloning repository:

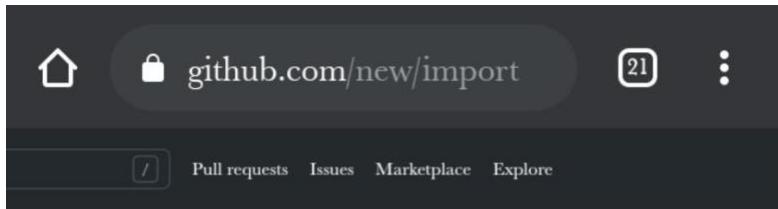
1) click **Code** And copy the link.

The screenshot shows a GitHub repository page for 'RoshanMaurya/IT-'. The top navigation bar includes a home icon, a lock icon for a private repository, the URL 'github.com/RoshanMaurya', a '21' badge, and a more options menu. Below the header, a green banner reads 'Learn Git and GitHub without any code!' with a 'Read the guide' button. The main repository area has tabs for 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. On the left, there's a sidebar with commit history and a 'Code' dropdown menu. The 'Code' menu is open, showing options for 'Clone' via 'HTTPS', 'SSH', or 'GitHub CLI' (which is highlighted in green). The URL 'https://github.com/RoshanMaurya/IT-' is copied to the clipboard. Other options in the menu include 'Download ZIP' and a 'Raw' link. To the right of the code menu, sections for 'About', 'Releases', and 'Packages' are visible, each with a 'No [content]' message. At the bottom of the page, standard GitHub footer links are present: '© 2021 GitHub, Inc.', 'Terms', 'Privacy', 'Security', 'Status', 'Docs', 'Contact GitHub', 'Pricing', 'API', 'Training', 'Blog', and 'About'.

2) Now Click Import repository.



3) Paste the link on box and click begin import.



Your old repository's clone URL

https://github.com/RoshanMaurya/IT-Tools.git

Learn more about the types of supported [VCS](#).

Your new repository details

Owner *

RoshanMaurya ▾

Repository Name *

Cloning Repository

Privacy



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.

[Cancel](#)

[Begin import](#)

[Security](#) [Status](#) [Docs](#)

[Contact GitHub](#) [Pricing](#)

Your Repository is cloning Successfully.

PRACTICAL : 3

BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

a) **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.

Open-source software 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 collaborative public manner. Open-source software is a prominent example of open collaboration.

Example :

Firefox - A Web browser that competes with Internet Explorer.

Zimbra - open source e-mail software that competes with Outlook server.

VLC Media Player - VLC Media Player is one of the most popular open source software examples that you can use for free.

Linux - Linux is one of the most user-friendly open source software on the market.

b) 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.

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, a term describing software that can be freely downloaded and used but which may contain restrictions for modification and reuse.

Example :

The Linux kernel - The Linux kernel is protected by the GPL, and is used daily by millions of people throughout the world.

Apache - Apache is the most widely used web server in the world.

Gimp - Gimp is a powerful bitmap mode digital creation program.

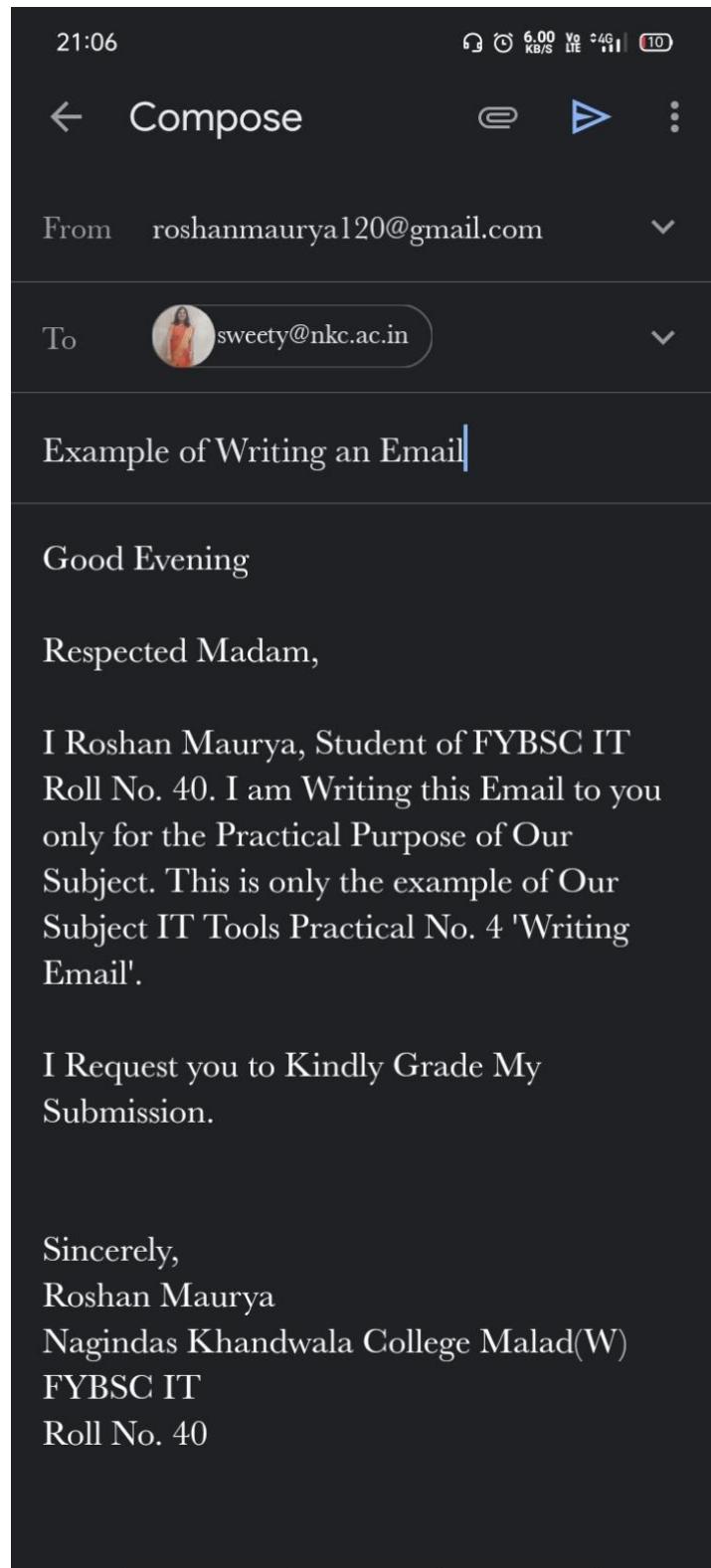
PostgreSQL - PostgreSQL is an object-relational database.

c) Difference between Free and Open Source Software.

Sr No.	Free Source Software	Open Source Software
1.	freeware refers to a software that you can use without incurring any costs.	Open source commonly refers to software that uses an open development process and is licensed to include the source code.
2.	Software freedom translates to social freedom.	Ethics are to be associated to the people not to the software.
3.	Free Software is Open Source Software.	Open Source software may not necessarily be Free Software.
4.	Free Software cannot work with other proprietary software.	Open Source software can work with other proprietary software.
5.	Examples: The Free Software Directory maintains a large database of free-software packages.	Examples: Open-Source Software are the Apache HTTP Server, Mozilla Firefox, Google Chrome.

Practical 4

- Writing an Email



Practical No. 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.

My Topic in this Project is Energy Efficiency :-

Energy Efficiency :

Energy efficiency simply means using less energy to perform the same task – that is, eliminating energy waste.

Energy efficiency brings a variety of benefits: reducing greenhouse gas emissions, reducing demand for energy imports, and lowering our costs on a household and economy-wide level.

Advantages :

The many benefits of energy efficiency include: Environmental.

Increased efficiency can lower greenhouse gas (GHG) emissions and other pollutants, as well as decrease water use.

Improving energy efficiency can lower individual utility bills, create jobs, and help stabilize electricity prices and volatility.

Disadvantage :

Investments in the small market for energy efficiency products and services.

Typically in a free market, customers choose vendors that offer desired services at reasonable prices.

In such a scenario, there is little or no government involvement.

Practical No. 6

Writing Blog

Success

Success

March 23, 2021

Journey Towards Success

Success Is a Journey, Not a Destination.

There are very few persons who have become Successful and maintaining a very easy life. But we see that after every successful man, there is a great sacrifice.

Success is not a matter of luck. The rewards one gets in life are usually the results of one's efforts. No man can hope to have a very easy life and also at the same time a very Successful one. If success would be easy, everyone would have it. However, the path to Success is not difficult to climb it as might as appear.



Failure is not the Opposite of Success,
It's a Part of Success.

Success comes to those who dare to act. It is very necessary to work hard to achieve Success. But it is said that, if we love our work we will never find it hard. There is no shortcut for hard work. There are no secrets to success. It is the result of preparation, hard work, and learning from failure.



Small Step Leads to big Success.

Success is not the key to happiness. Happiness is the key to success. If you love what you are doing, you will be successful. Success follows Success. Nothing is impossible for a man who has a purpose and the perseverance to achieve it. Self-confidence, Courage, and Strong Willpower are the necessary tools to obtain Success.

Steps Towards Success:



Take Steps Towards Your Future !

1) Set Goals with the Greatest Positive Impact.

GOAL SETTING

- S** Specific
- M** Measurable
- A** Achievable
- R** Realistic
- T** Timely



Dream Big, Set Goals, Take Action !!

We are often pulled in many directions, which makes it hard to accomplish even one small goal. To Achieve your goals, look at all areas of your life such as Family, Health, Career, Finances, and other activities. Then decide what goals in each area truly motivate you and will most Positively Impact in your Life.

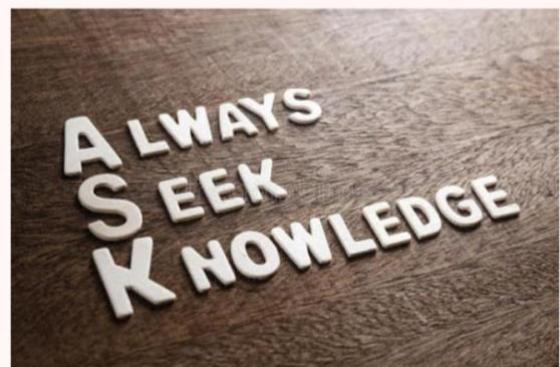
2) Focus on commitment, not motivation.



The road to Success is through Commitment.

Focus on Commitment, not Motivation. If you focus only on results, your motivation will be like weather. Commitment is what, Transform a Promise into Reality. Without Commitment you Cannot have a depth in anything whether it's A Relationship, A Business, or A Hobby.

3) Seek knowledge, not results.



Follow the Path of Knowledge.

Your Mind is a Powerful Things, when you fill it with Positive Thoughts, your life will start to change. So the key is to focus on the journey, not the destination. Keep thinking about what you are learning along the way and what you can improve.

4) Improve Your Emotional Intelligence.



Emotional Intelligence allows us to Respond
Instead of React.

Emotional intelligence (EQ), Continues to be an Increasingly Popular Skill to have in the Professional World. Emotional Intelligence (EI), a set of skills that help us recognize, understand, and manage our own emotions as well as recognize, understand and influence the emotions of others.



Practical No. 7

Implementing coding practices in Python using PEP8.

1)

The image shows a Python code editor interface with two panes. The left pane is titled 'main.py' and contains the following Python code:

```
1  class property:
2
3  def __init__(self):
4      self.age = e
5
6  @property
7  def get_age(self):
8      print("Student of FYBSC IT")
9      return self._age
10
11 @get_age.setter
12 def age(self,a):
13     if(a < 18):
14         raise ValueError("Sorry You
15             are not Eligible, ")
16     print("Roshan Rajdev Maurya")
17     self._age = a
18
19 mark = property()
20 mark.age = 40
21
```

The right pane is titled 'Shell' and displays the output of running the code:

```
Roshan Rajdev Maurya
Student of FYBSC IT
40
> |
```

A blue 'Run' button is located at the bottom center of the editor.

2)

main.py Shell

```
1 # Overloading equality and less
   than operator in python
2
3 class A:
4     def __init__(self, a):
5         self.a = a
6     def __lt__(self, other):
7         if(self.a < other.a):
8             return "ob1 is lessthan
               ob2"
9     else:
10        return "ob2 is less
               than ob1"
11    def __eq__(self, other):
12        if(self.a == other.a):
13            return "Both are equal"
14        else:
15            return "Not equal"
16 ob1 = A(2)
17 ob2 = A(3)
18 print(ob1 < ob2)
19 ob3 = A(4)
20 ob4 = A(4)
21 print(ob1 == ob2)|
```

Run

main.py Shell

```
ob1 is lessthan ob2
Not equal
> |
```

OVERVIEW

Name :- Devansh B. Vala

Standard :- FYIT(sem-2)

Roll no. :- 97

GREEN IT ADOPTION TRENDS: AN OVERVIEW

- This report divides 11 Green IT initiatives into four major groups:
 - ❖ Virtualization and Consolidation
 - ❖ Energy Efficiency
 - ❖ Travel Reduction
 - ❖ Asset Disposal.

FOUR MAJOR GROUPS:

◆ *Virtualization & Consolidation:*

Initiatives in this area include server virtualization and consolidation, storage consolidation and desktop virtualization. These projects typically improve cost and energy efficiency through optimized use of existing and new computing and storage capacity, electricity, cooling, ventilation and real estate.

◆ *Energy Efficiency:*

Initiatives in this area include server room upgrades and new builds, IT energy measurement, printer consolidation, and PC power management. These projects have energy efficiency or reduction as a major cost savings benefits.

◆ *Travel Reduction:*

Initiatives in this area include remote conferencing & collaboration and telecommuting. These projects are typically associated with reductions in travel, fuel and commuting costs.

◆ *Asset Disposal:*

IT equipment recycling is the lone initiative in this category.

- ❖ Half the companies who participated in this study are either piloting or implementing at least one of the 11 Green IT initiatives.
- ❖ By and large, the most commonly adopted initiatives involve major cost savings up-front, with fewer major investments required.
- ❖ The most popular initiatives across the board include storage consolidation, remote conferencing and telecommuting, all of which yield immediate cost reduction benefits to the business if implemented correctly

STUDY AND METHODOLOGY

Name :- Paras Poriya

Standard :- FYIT(Sem-2)

Roll No. :- 64

STUDY OF GREEN IT COMPANIES

- ❖ Recently, green technology has become an attraction to researchers in engineering, manufacturing, material science, chemical engineering, environment science and energy areas.
- ❖ Engineering is the most widely discussed research area covering the green technology.

METHODOLOGY

- ❖ The paper gives the survey of green manufacturing, what is green manufacturing why it is needed and methods of green manufacturing that reduces the waste and even pollution.
- ❖ The paper focus on the green design for environment of green manufacturing system, energy conservation, development of product with less wastage.

ENERGY EFFICIENCY

Name :- Roshan Maurya

Standard :- FYIT(Sem-2)

Roll No. :- 40

ENERGY EFFICIENCY

- ❖ Green Computing is a recent trend towards designing, building, and operating computer systems to be energy efficient.
- ❖ The goals are to maximize energy efficiency during the product's lifetime, reduce the use of hazardous materials
- ❖ It Promote recyclability or biodegradability of defunct products and factory waste

ADVANTAGES

- ❖ The many benefits of energy efficiency include: Environmental:
- ❖ Increased efficiency can lower greenhouse gas (GHG) emissions and other pollutants, as well as decrease water use.

DISADVANTAGE

- ❖ For large firms, many efficiency investments are too small to be attractive because of high transaction costs of the cost of energy-efficient equipment.
- ❖ The conventional method used to conserve genetic resources of date palm has been supplemented in recent years by rapid developments in plant biotechnology.

The following are examples of energy efficiency.

- ◊ Reuse
- ◊ Resource Utilization
- ◊ Efficient Design
- ◊ Maintenance
- ◊ Waste Reduction

LAWS OF NATURE

Name :- Abhay Gupta

Standard :- FYIT(Sem-2)

Roll No. :- 15

HAVE WE BECOME SEPARATE FROM NATURE?



NATURE AS A RESOURCE?

An aerial photograph showing a large, brown, deforested area on the left, characterized by a grid-like pattern of agricultural fields. This area is bordered on the right by a dense, dark green forest. The contrast between the cleared land and the untouched forest is stark.

LIMITED

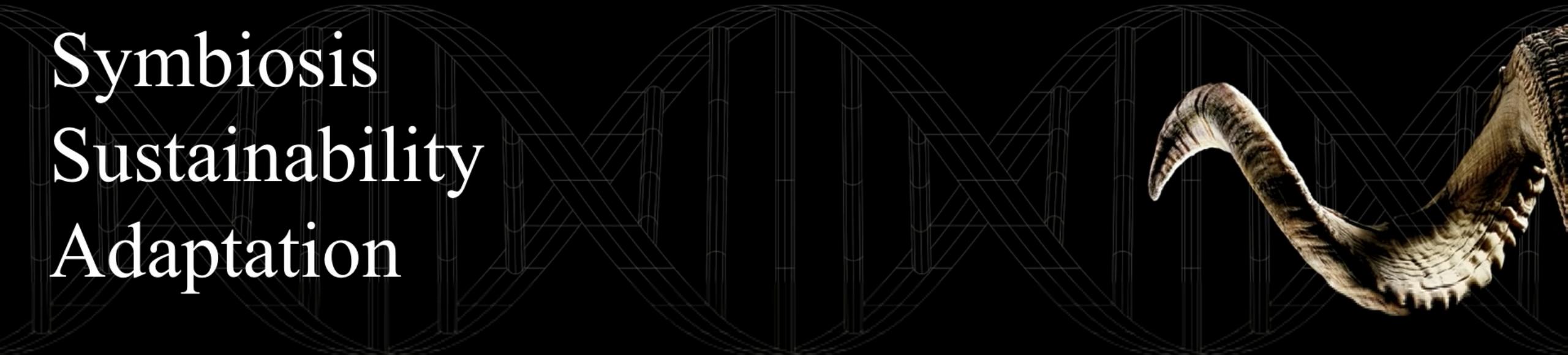
UNLIMITED

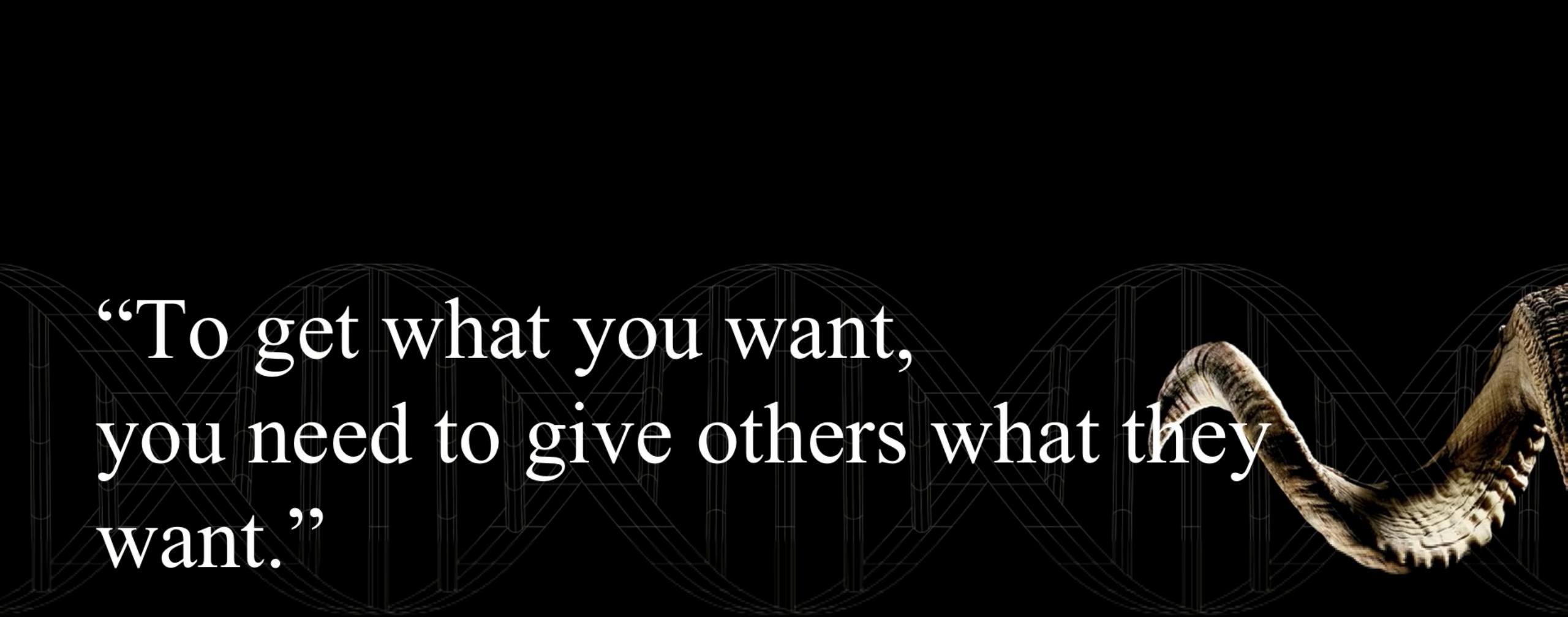
3 NATURAL LAWS:

Symbiosis

Sustainability

Adaptation





“To get what you want,
you need to give others what they
want.”

The heart of symbiosis in an eco-system.



TRAVEL REDUCTION

Name :- Nitesh Vasave

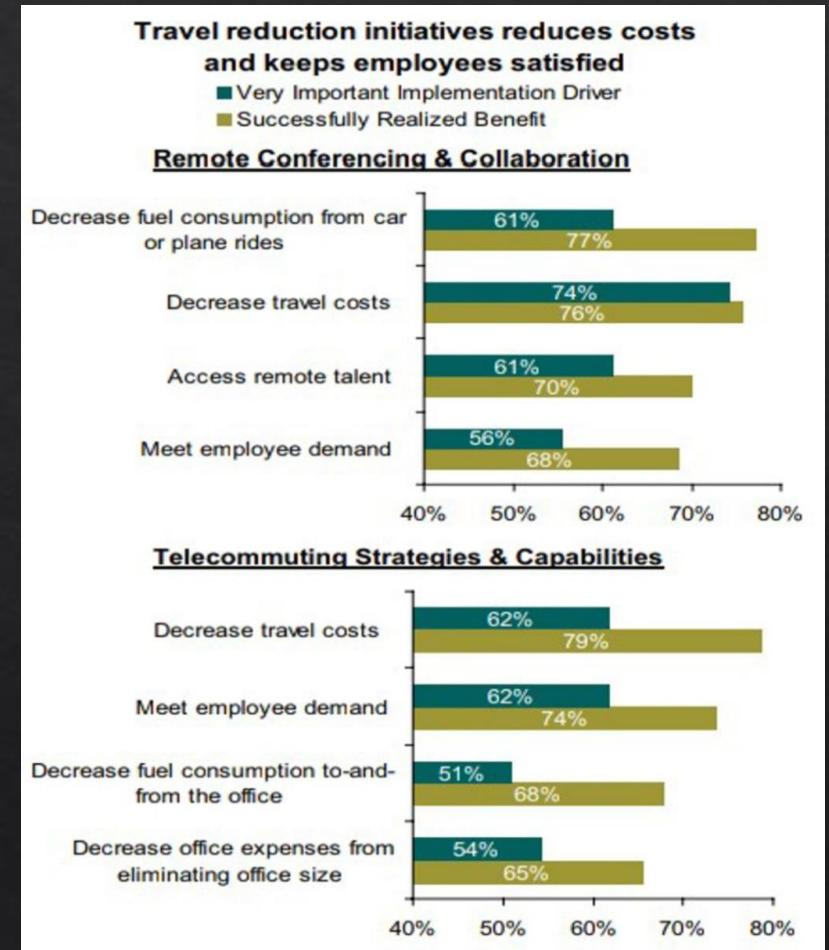
Standard :- FYIT(Sem-2)

Roll No. :- 143

TRAVEL REDUCTION

- ❖ Remote configuration & Telecommuting Strategies
- ❖ Remote configuration and collaboration:-
- ❖ Telecommuting Strategy and Capabilities:-

Policies and strategies allowing or encouraging employees to Work from home.



❖ CUTTING TRAVEL COSTS WHERE IT COUNTS

These initiatives not only reduce costs of fuel, flights, hotels and related expenses, but also result in higher employee satisfaction.

❖ Keeping Your People Happy

Organization are also gaining access to remote talent that they otherwise would not be able to tap. In two-thirds of all travel reduction project Organization reports their employees are very satisfied with the increased flexibility they are now offered.

GREEN SUPPLY CHAIN MANAGEMENT INITIATIVES

**NAME :- AMAN YADAV
STANDARD :- FYIT(SEM-2)
ROLL NO. :- 103**

Green Supply Chain Management Initiatives

- Green Supply Chain Management aims to integrate environmental thinking into supply chain management.
- This includes product design, material sourcing and selection, the manufacturing process and delivery of the final product to consumers.
- Approximately 2 million tons of e-waste are generated annually in India
- The management of e-waste and implementation of green initiatives to manage the supply chains have become imperative for Indian IT and electronics industry.
- They are innovating and coming up with cutting edge solutions that help them become more profitable, while helping the environment



HCL Infosystems Limited



- ❖ HCL Infosystems Ltd. is India's premier hardware, services and ICT systems integration company, which offers a wide spectrum of ICT products that include computing, storage, networking, security, telecommunication, imaging and retail solutions
- ❖ HCL always focused on developing a sustainable future through environment friendly ICT products and services.
- ❖ This led to the introduction of Green desktops, equipped with the unique Dynamic Energy Saver (DES) technology, that cut overall power consumption by 20-35%.
- ❖ The company has also taken the following initiatives to conserve energy:
 - Use of recyclable packing materials in PCs and monitors.
 - Made S3 as the default sleep state in all products shipped with Microsoft Windows OS, so that the product automatically switches to standby mode after a specified amount of system inactivity.
 - Compliance with MPR-II certification for CRT monitors.
 - Compliance with TCO'03 certification for LCD monitors.

Tata Consultancy Services



- ❖ Tata Consultancy Services (TCS) Limited is one of the best Indian IT services, consulting and business solutions organizations.
- ❖ It is committed to measure, report and continually improve its overall environmental performance by optimizing its resource consumption, minimizing its ecological impact and in line with the precautionary principle espoused by Article 15 of the Rio Declaration, working to reduce its carbon footprint.
- ❖ TCS has developed an environment policy that guides its key activities. The basic foundation of the policy is:
 - ❖ Climate change mitigation through commitment to reduce Greenhouse Gas (GHG) emissions and corresponding carbon footprint.
 - ❖ Green procurement.
 - ❖ Reduce, reuse, recycle.
 - ❖ Resource efficiency.
 - ❖ Green infrastructure – green buildings.
 - ❖ Green IT.

IT EQUIPMENT RECYCLING



Name: Aryan Pandey

Roll number: 114

Class : fyit

IMPORTANCE ELECTRONIC RECYCLING



- Rich source of raw materials
- Solid waste management
- Toxic materials
- International movement of hazardous waste

E-waste



- ❖ E waste in electrical electronic equipment that has been discarded working and broken items that are thrown in in the garbage aur donated to the charity reseller like goodwill.
- ❖ E-waste is particularly dangerous due to toxic chemical that naturally from the metals inside when buried.

DISADVANTAGES OF GOING GREEN

NAME :- BHUSHAN KADAM

STANDARD :- FYIT(SEM-2)

ROLL NO. :- 32

Disadvantages of going green

1. Expenses :
2. Data Safety is important :
3. Dearness
4. Customer backlash

Disadvantages of going green

5. Is it worth it?

6. Competition

7. Marginal impact

GREEN IT EMISSIONS AND GREEN IT TYPICAL DIMENSIONS

NAME :- RITESH SONI

STANDARD :- FYIT(SEM-2)

ROLL NO. :- 90

- ❖ Green It
- ❖ Virtualization And Consolidation
- ❖ Energy Efficiency

- ❖ Asset Disposal
- ❖ Factors During Implementation
- ❖ Green It Outcomes