**IT TOOLS ASSIGNMENT**

**NAME – RUPAL PATEL**

**ROLL NO – 59**

**CLASS – FYIT**

1)Explain Green Computing with its advantages

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

Advantages of Green Computing

1. Sustainable computing means reduced energy consumption that leads to reduce GHG emission and fossil fuel usage.
2. Green computing is cost effective due to less energy usage and cooling requirements.
3. Sustainable IT helps in the preservation and effective utilization of natural resources.
4. It encourages reuse and recyclability that will result in a lesser number of electronic wastes.
5. Green IT uses non-toxic component which do not pose any health hazard to the end-users.
6. It causes a considerable reduction in the quantity of heat produced from computing devices.
7. Sustainable computing inspires people to reduce, reuse, and recycle.
8. Green IT implementation helps in improving the public image of an individual or an organization.

2)What is E-waste? What can be done to reduce the impact of E-waste.

* E-waste is any electrical or electronic equipment that’s been discarded.
* This includes working and broken items that are thrown in the garbage or donated to a charity reseller like Goodwill.
* Often, if the item goes unsold in the store, it will be thrown away.
* E-waste is particularly dangerous due to toxic chemicals that naturally leach from the metals inside when buried.

Reduce impact of E-waste

1. Sell old Electronics:

One of the best and easiest methods of reducing the electronic waste footprint is to sell or donate your electronic gadgets to those in need. If you are planning on selling, you should be able to easily find a buyer as they will have the opportunity to purchase the same product at a much lower price than if it were new. You get easy money while the buyer gets a nice gadget; a win-win for both.

1. Donate old Electronics:

Donating electronics to the needy is also a practice followed by many. It not only gives the gadget a new life, but also makes you feel good about yourself. If you decide to donate your old electronic devices when you don’t need them anymore, make sure to clear any information (like data in your laptop hard drive) before you donate it.

1. Recycle and Dispose of E-Waste Properly:

Improperly disposed e-waste is becoming more and more hazardous, especially as the sheer volume of our e-waste increases. For this reason, large brands like Apple, Samsung, and other companies have started giving options to its customers to recycle old electronics. Sometimes, you may even get financial compensation for recycling your old devices!

1. Maintain your Electronics:

One of the best ways to save your money and reduce e-waste is to keep your electronics well-maintained, to increase its life. Here are some tips to get you started.

1. Repurpose or Re-evaluate:

Always think twice before upgrading or buying a new electronic device.

3)What are benefits of going paperless.

* **Saves Time**:

Time spent filing, organizing, and searching for paper documents is time that could be spent on more productive tasks. Digitized documents are stored in a central repository, which is basically a well-organized digital filing cabinet where all of your documents live.

* **Saves Space**:

Paper takes up a lot of space – as do filing cabinets and space to store those filing cabinets. Books and bookshelves are bulky, too. What’s worse, paper keeps piling up, oftentimes accumulating more quickly than it can be sorted and organized. This is particularly true of industries that have long mandatory retention periods for paperwork like the financial industry.

* **Saves Money**:

Going digital improves process efficiency, saving you money. Paperless offices can process a much larger volume of paperwork compared to traditional offices in the same amount of time.

* **Promotes the Environment**:

Manufacturing paper products produce greenhouse gases, causing deforestation and global warming. Recycling can offset some of the environmental impact, but not by much. Most paper eventually ends up in a landfill. Further, ink and toners contain volatile compounds and non-renewable substances which are damaging to the environment. It is much more sustainable to simply reduce paper use altogether by switching to a paperless office.

* **Boosts Security**:

Physical documents are hard to track – reams of paper can get lost, misfiled or destroyed without anyone noticing. It can also be difficult to monitor the access, printing and copying of sensitive files. Document management software has advanced [security capabilities](https://www.laserfiche.com/products/security/) that can tackle these challenges.

4)What is Github? Give advantages of using Github.

* GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere.
* This tutorial teaches you GitHub essentials like repositories*,*branches*,*commits*, and*Pull Requests*.*
* You’ll create your own Hello World repository and learn GitHub’s Pull Request workflow, a popular way to create and review code.

Advantages of Using Github.

**1. It makes it easy to contribute to your open-source projects**  
To be honest, nearly every open-source project uses GitHub to manage their project. Using GitHub is free if your project is open source and includes a wiki and issue tracker that makes it easy to include more in-depth documentation and get feedback about your project. If you want to contribute, you just fork a project, make your changes and then send them a pull request using GitHub web interface.

**2. Documentation**  
By using GitHub, you make it easier to get excellent documentation. Their help section and guides have articles for nearly any topic related to git that you can think of.

**3. Showcase your work**  
Are you a developer and wishes to attract recruiters? GitHub is the best tool you can rely on for this. Today, when searching for new recruits for their project, most companies look into the GitHub profiles. If your profile is available, you will have a higher chance of being recruited even if you are not from a great university or college.

**4. Markdown**  
Markdown allows you to use a simple text editor to write formatted documents. GitHub has revolutionized writing by channelling everything through Markdown: from the issue tracker, user comments, everything. With so many other programming languages to learn for setting up projects, it’s really a big benefit to have your content inputted in a format without having to learn yet another system.

**5. GitHub is a repository**  
This was already mentioned before, but it’s important to note, GitHub is a repository.  
What this means that it allows your work to get out there in front of the public. Moreover, GitHub is one of the largest coding communities around right now, so it’s wide exposure for your project.

**6. Track changes in your code across versions**  
When multiple people collaborate on a project, it’s hard to keep track revisions—who changed what, when, and where those files are stored. GitHub takes care of this problem by keeping track of all the changes that have been pushed to the repository. Much like using Microsoft Word or Google Drive, you can have a version history of your code so that previous versions are not lost with every iteration.

**7.Integration options**  
GitHub can integrate with common platforms such as Amazon and Google Cloud, services such as Code Climate to track your feedback, and can highlight syntax in over 200 different programming languages.

5)Write a program using PEP8 rules.

