NAVEEN
RN-1
FYCS
IT TOOLS

ASSIGNMENT 3

Q1) Green Computing with its advantages.

Ans: Definition: 1)Green Computing refers to durable computing of the environment. This reduces the use of electricity as well as power and reduces environmental waste when we are using a computer.

2) It Computing has the same goal with green chemistry, which is now the life of the product and makes the product more energy efficient, the abandoned product and factory waste are more easily recycled and to be biodegradable, less Dangerous Use Content.

3) ADVANTAGES OF GREEN COMPUTING

a)Lessened vitality utilization by green registering advances converts into low carbon dioxide emanations, which emerge because of the absence of petroleum derivatives utilized as a part of intensity plants and transportation, Conservation of resources means less energy is required to produce, use and dispose of products.

b)Saving energy and resources saves money.

c)Green processing includes changing government arrangement to empower reusing by people and organizations and to lessen vitality utilization.

d)Reduce existing exposure in laptops such as chemical, cancer, nerve damage, and is known due to immune responses in humans.

e)There are many areas in which Uses of green computing are

- **Energy Management in Data Centre's.**
- **Green Cloud Computing in Energy Efficiency.**
- **Green Wireless Network.**
- **Green Parallel Computing with Big Data Systems.**
- **Green cloud computing along with genetic algorithm.**

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

Ans:

1) 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.

2) E-waste is particularly dangerous due to toxic chemicals that naturally leach from the metals inside when buried.

3) E-waste is electronic products that are unwanted, not working, and nearing or at the end of their "useful life." Computers, televisions, VCRs, stereos, copiers, and fax machines are everyday electronic products.

4) Ways to Reduce E-Waste and its Hazards

A) Recycle and Dispose of E-Waste Properly

1)Improperly disposed e-waste is becoming more and more hazardous, especially as the sheer volume of our e-waste increases.

2)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.

3)Recycling old electronics allows the expensive electronic parts inside to be reused. This can save a lot of energy and reduce the need for mining of new raw resources, or manufacturing new parts.

B) Be a good consumer.

1)Do some research when you're ready to buy a new product. Make sure it's one that won't break easily or become damaged shortly after you purchase it.

2) In other words, look for products likely to have a much longer lifespan so you won't need to replace it within a few years, or even months.

3)It's known that this is a common practice in the electronics industry; to make products with shorter life spans so more money can be earned in the long run when they break or malfunction.

c) Recycle, recycle, recycle.

1)No matter what you have, it's important to always dispose of your e-waste properly. That means recycling all of your used electronics, with the understanding that improperly disposing of e-waste is becoming more and more hazardous, particularly since the volume of e-waste has skyrocketed.

d) Store Your Data Online.

1)Why use a memory stick or device when you can now easily store significant amounts of data on the Internet. There are many different types of clouds storage available online such as Dropbox and Google Drive (free). Some of the paid services will provide a free 30-day trial so you can see what will work best for you.

3. What are the benefits of going paperless.

Ans:

A)Saves Time:

1)Time spent filing, organizing, and searching for paper documents is time that could be spent on more productive tasks. 2)Digitized documents are stored in a central repository, which is basically a well-organized digital filing cabinet where all of your documents live.3)Using a digital document management system, you'll get to harness the same powerful search abilities that you're used to using on Google. 4)This means employees can find files at the click of a button, much more quickly than the laborious, manual process of searching for a specific file in a buried folder.

B)Saves Space:

1)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.2) This is particularly true of industries that have long mandatory retention periods for paperwork like the financial industry.3)Digitizing files allows you to store all documents either on an on-premises server or in the cloud. Digital file folders in a repository require much less space than a physical records archive.

C)Eases Transfer of Information:

1)Document management software offers a simple process for saving documents. The software easily compiles digital documents using scanners, mobile capture using a camera on a phone or tablet or importing any file type (.docx, .pdf, image files). 2)Many commonly used applications, like Microsoft Office and Adobe Acrobat, integrate with document management systems

D)Boosts Security:

1)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.2) Document management software has advanced security capabilities that can tackle these challenges.

E)Digitizing Paper-Based Processes:

1)Technology has so seamlessly replaced paper processes that it's difficult to remember how things used to be done.2) In nearly all cases, the evolution from paper-based items to their electronic counterparts is profoundly more efficient.

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

Ans:

1)GitHub is a Git repository hosting service, but it adds many of its own features. While Git is a command line tool, GitHub provides a Web-based graphical interface.

2) It also provides access control and several collaboration features, such as a wikis and basic task management tools for every project.

3) Advantages of using github

A) It Makes It Easy to Contribute to Your Open Source Projects

1) GitHub is free if your project is open-source, and GitHub includes a wiki and issue tracker that makes it easy to include more in-depth documentation and get feedback about your project. 2)If you want to contribute, you just fork a project, make your changes and then send them a pull request using GitHub web interface.

B)Documentation

1)By using GitHub, itmake its easier to get excellent documentation. Their help section and guides have articles for nearly any topic related to git that you can think of.

C)Markdown

1)Markdown allows you to use a simple text editor to write formatted documents. GitHub has revolutionized writing by channeling everything through Markdown: the issue tracker, user comments, everything. 2)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.

D)GitHub is a Repository

1)This was already mentioned before, but it's important to note, GitHub is a repository.2)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.

E)Integration Options

1)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.
Ans:

```
""" This is the third test """
import string
SHIFT = 3
CHOICE = input("would you like to encode or decode?")
WORD = input("Please enter text")
LETTERS = string.ascii_letters + string.punctuation + string.digits
ENCODED = ''
if CHOICE == "encode":
    for letter in WORD:
        if letter == ' ':
            ENCODED = ENCODED + ' '
        else:
            x = (LETTERS.index(letter) +
                 SHIFT)
            ENCODED = ENCODED + LETTERS[x]
if CHOICE == "decode":
    for letter in WORD:
        if letter == ' ':
            ENCODED = ENCODED + ' '
        else:
            x = LETTERS.index(letter) - SHIFT
            ENCODED = ENCODED + LETTERS[x]

print(ENCODED)
```