

ASSIGNMENT

1.Explain Green Computing with its advantages.

Ans; 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 is also known as green information technology (green IT).

Advantages of green computing :

- 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.
- Saving energy and resources saves money.
- Green processing includes changing government arrangement to empower reusing by people and organizations and to lessen vitality utilization.
- Reduce existing exposure in laptops such as chemical, cancer, nerve damage, and is known due to immune responses in humans.

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

Ans: 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.

Ways to reduce 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.

2. 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.

3. 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. 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.

4. 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.

5.Store Data Online

Cloud services are much better than you would think in reducing your environmental impact. By storing data online, you get to access your data from anywhere around the world, without the need to carry a storage device at all times. Cloud storage also gives you a large amount of storage, for free or for very cheap.

3. What are the benefits of going paperless.

Ans: • 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. 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.

• 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.

• Digitizing Paper-Based Processes

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

• Promotes the Environment

Manufacturing paper products produce greenhouse gases, causing deforestation and global warming. It is much more sustainable to simply reduce paper use altogether by switching to a paperless office.

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

Ans: Github is a hosting platform wherein developers can store their computer code in the github server in files and folders called repository and track them continuously. It is an open-source version control and collaboration platform for program developers. It helps all the programmers to collaborate with each other who are working on a similar project and also share their code easily as and when required. The collection of these files will show the source code of a program which is spread across the files to make it easier to manage what can be many thousands of lines of code and still be able to find the parts you need to find.

Advantages of using GitHub :

- **It's free and it is open source:** *As discussed earlier, github is completely free and you can use it without paying and since it is an open source you can download the source code and can make changes as per the requirements.*
- **It is fast:** *Since most of the operations are preferred locally, it allows huge benefit in terms of speed.*
- **It provides good backup:** *Here chance of losing data is very low as it provides the multiple copies of it.*
- **Multiple developers can work:** *Github allows multiple developers to work on a single project at a time. It helps all the team members to work together on a single project at a time from different locations.*

5. Write a program using PEP8 rules.

Ans: While naming of function of methods always use *self* for the first argument to instance methods and *cls* for the first argument to class methods. If a function's argument name matches with reserved words then it can be written with a trailing comma. For e.g., class_

PROGRAM:

```
# Python program to find the
# factorial of a number provided by the user.

# change the value for a different result num = 7

# uncomment to take input from the user
#num = int(input("Enter a number: "))

factorial = 1

# check if the number is negative, positive or zero
if num < 0:

    print("Sorry, factorial does not exist for negative numbers")
elif num == 0:

    print("The factorial of 0 is 1")
else:

    for i in range(1,num + 1):

        factorial = factorial*i
```

```
print("The factorial of",num,"is",factorial)
```

OUTPUT :

The factorial of 7 is 5040