

ASSIGNMENT

1. Explain Green Computing with its advantages.

Answer: Definition – **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. 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.

Advantages of Green Computing:

The different **benefits of green computing** are

- 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.

Answer: E-waste, or electronic waste, encompasses electrical and electronic equipment that's outdated, unwanted, or broken. That means everything from smartphones to end-of-life refrigerators. Basically, anything that runs on electricity that you've decided to get rid of. Globally, we only recycle 10% of our e-waste, a number that's as shocking as it is depressing. As for the 90% we don't recycle, it ends up getting landfilled, incinerated, or illegally traded.

The Techniques which can be used to reduce the impact of E-Waste:

- **Reduce:** The easiest way to solve the e-waste crisis is to produce less e-waste. I know, easier said than done. Companies are constantly rolling out new products—like Apple, for instance, with its iPhone. Newer products look and function better than their predecessors, but novelty comes at a price. Instead of buying that flashy new gadget, stick to what you've got. Also, by taking care of your electronics you can ensure that they last longer. When you don't have to replace them as often, you end up saving money.
- **Reuse:** Instead of tossing out that old television set or gaming console, consider regifting, selling, or donating it. You could also hold on to it. Who knows, it might end up being worth something someday. Look at the Original Apple 1.
- **Repair:** People often throw out and replace broken electronics instead of getting them repaired. True, repairs can be expensive, but for those who aren't afraid of a DIY project, it's a cheap fix. Online resources like iFixit, a website that boasts free repair guides for everything, provide reliable information that'll help you get your tech back in working order. Always remember to be safe, though.
- **Recycle:** As a last resort, you can always recycle your e-waste—just make sure you're doing it correctly! Many communities have e-waste recycling events and drop-off depots that handle these materials. If your city is currently a member of our network, download the Recycle Coach app to find out how. Organizations like TerraCycle accept e-waste in the U.S. and Canada. So do some manufactures and retailers, like Apple and Best Buy.

3. What are the benefits of going paperless.

Answer: **7 Benefits of Going Paperless**

1. Document organization

The ability to quickly locate and disseminate information may enhance your company's efficiency and professional image. Spending time hunting through piles of paper slows down response time in an age when most answers are only a few keystrokes away. By scanning electronic copies of receipts and invoices, documents can be sorted, filed, and organized for quick retrieval when it matters most.

2. Client communication is faster and less expensive

By maintaining a customer email list, you can instantaneously communicate sales and special offers without incurring postage and printing expenses. With the advanced technology of smart devices, most people have immediate access to emails. While it increases efficiency, electronic communication also decreases storage costs as the amount of paper copies littering your office will begin to dwindle.

3. Paperless files are easily saved and retrieved on the go

With the advent of photo-scanning apps, business travelers can easily back up expense reports without needing to save a pile of papers to bring back to the office. Electronic files can also be shared with coworkers over a network or via email. Shifting to paperless documentation also makes the transportation of data more efficient, without the need for cumbersome fax machines or document couriers.

4. Automatic backups

When you accidentally throw out an important paper, it's usually gone forever. However, maintaining electronic files allows for multiple backup points. Data can be saved on flash drives, in the cloud, or to an external hard drive. For vitally

important financial data, cloud-based accounting systems provide automatic backups on a pre-scheduled basis, which eliminates the need for small business owners to set aside time for manual backups.

5. Data security

Customers will always be concerned about privacy and data protection, which requires companies to respond by implementing proper data security procedures beyond locked filing cabinets and paper shredders. Many of today's cloud-based accounting systems offer bank-level data security to protect financial and customer information, which is more than most small companies with limited technology staff can afford to build in-house.

6. Environmental friendliness

According to the Environmental Paper Network's most recent State of the Paper Industry report, paper usage in North America is decreasing while the amount of paper recovered for recycling is increasing. Companies are striving to recycle, yet office copy paper alone still accounts for over 20 percent of the total paper usage in the United States. But being green is more than just reducing paper production. A paperless environment may also mean less energy consumption. Small businesses use less energy when printers, faxes, and copiers are inactive.

7. Financial benefits

The savings of going paperless extends beyond just the cost of the paper, which can be substantial. The cost of other office supplies like ink cartridges also decreases. Additional upgrades or replacements to expensive office equipment such as copiers and fax machines may also decrease in a paperless office.

The shift toward a paperless environment increases each year as new technology becomes available to improve data storage and electronic communication. Taking action to reduce paper usage may help your business be more efficient and enhance the level of security that guards your most valuable information.

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

Answer: **GitHub** is a website and cloud-based service that helps developers store and manage their code, as well as track and control changes to their code. To understand exactly what GitHub is, you need to know two connected principles:

- Version control
- Git

GitHub is a for-profit company that offers a cloud-based Git repository hosting service. Essentially, it makes it a lot easier for individuals and teams to use Git for version control and collaboration.

GitHub's interface is user-friendly enough so even novice coders can take advantage of Git. Without GitHub, using Git generally requires a bit more technical savvy and use of the command line.

GitHub is so user-friendly, though, that some people even use GitHub to manage other types of projects – like writing books.

Advantages of 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.

Program code:

```
pep8.py - F:/CLG/IT TOOLS/Assignment/pep8.py (3.9.2)
File Edit Format Run Options Window Help

# This program performs palindrome check for a string #
# function which return reverse of a string
def isPalindrome(s):
    # Calling reverse function
    if len(s) <= 1 :
        return True
    if s[0] == s[len(s) - 1] :
        return isPalindrome(s[1:len(s) - 1])
    else :
        return False

# Driver code
Palindrome_input_Variable = [
    ' AnnA ', ' IMRAN', ' Redder ', ' Mom ', ' Refer', ' Noon '
]
print( " PALINDROME CHECK PROGRAM " )
for i in Palindrome_input_Variable:
    ans = isPalindrome(i)
    if ans == 1:
        print( " The given string ", "' ' , i , "' ", "is a palindrome")
    else:
        print( " The given string " , "' ' , i , "' ", "is not a palindrome")
```

OUTPUT:

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:5
D64)] on win32
Type "help", "copyright", "credits" or "license()" for
>>>
===== RESTART: F:/CLG/IT TOOLS/Assignment/
PALINDROME CHECK PROGRAM
The given string      '  Anna  '    is a palindrome
The given string      '  IMRAN  '    is not a palindrome
The given string      '  Redder  '    is not a palindrome
The given string      '  Mom    '    is not a palindrome
The given string      '  Refer   '    is not a palindrome
The given string      '  Noon    '    is not a palindrome
>>> |
```