Tanish Marick
FYCS
28

Practical No: 5

Using practical examples, describe green computing. List and explain the steps that you take to contribute to green computing.

What is 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.

Green computing aims to attain economic viability and improve the way computing devices are used. Green IT practices include the development of environmentally sustainable production practices, energy-efficient computers and improved disposal and recycling procedures.

Government regulatory authorities also actively work to promote green computing concepts by introducing several voluntary programs and regulations for their enforcement.

Examples include:

- Purchasing from Environmentally Committed Companies.
- Participating in Electronic Recycling Programs.
- Deploying Virtual Technologies.
- Limiting Printing and Recycling Paper.

The goals of green computing are similar to green chemistry: reduce the use of hazardous materials, maximize energy efficiency during the product's lifetime, the recyclability or biodegradability of defunct products and factory waste

We can make our contribution to Green Computing by taking the following steps:

1. Purchase Energy Star Products: Buy "Energy Star" labeled monitors, desktops, laptops, and printers. The "Energy Star" devices can be programmed to "power-down" to a low power state when they are not in use, helping you save energy and run cooler which helps them last even longer.

2. Sleep Mode: Put laptops in "sleep" mode when not in use. The EPA has estimated that this reduces their energy use by 60 to 70 percent – and ultimately could save enough electricity each year to power Vermont, New Hampshire, and Maine, cut electric bills by $2 billion, and reduce carbon dioxide emissions by the equivalent of 5 million cars.

Tanish Marick
FYCS
28

3. Turn off devices when not in use: Turn OFF computers and other equipment when not in use. Despite the debate over whether it's better for your computer to be left on or shut off, the fact is it's better for the environment to shut it off. Your computer can handle it just fine in fact, computers were designed to be turned off and back on!

4. Limiting E-waste: Don't throw your old computer away Globally over 35 million PC's are thrown away every year yet there are many companies now recycling or reconditioning components or whole computers. Your old computer might be worth something either to a dealer, a local school or a charity.

5. Use more efficient displays: If you have old CRT monitors still in use, replacing them with LCD displays can save up to 70 percent in energy costs. However, not all LCD monitors are created equal when it comes to power consumption. High efficiency LCDs are available from several vendors.

6. Purchase energy saving hardware: If you don't need super-fast computing power then look out for energy efficient components when buying a new computer, such as green hard drives and low-energy processors. While performance is slower they can use remarkably less power. Purchasing an energy saving power supply unit for a desktop PC can help the environment and save money, they're often quieter too.