

3.2 IoT Devices Versus Computers:

Internet of Things (IoT):

The Internet of Things (IoT) is the network of physical objects/devices like vehicles, buildings, cars, and other items embedded with electronics, software, sensors, and network connectivity that enables these objects to collect and exchange data. IoT devices have made human life easier. The IoT devices like smart homes, smart cars have made the life of humans very comfortable. IoT devices are now being a part of our day-to-day life.

Computers:

A computer is a hardware device embedded with software in it. The computer does most of the work like calculations, gaming, web browsers, word processors, e-mails, etc. The main function of a computer is to compute the functions, to run the programs. It takes input from the computer and then computes/processes it and generates the output.



Function of Computer

Overview of IoT Vs Computers:

One big difference between IoT devices and computers is that the main function of IoT devices is not to compute (not to be a computer) and the main function of a computer is to compute functions and to run programs. But on IoT devices that is not its main point, it has some other function besides that. As an example like in cars, the function of IoT devices are not to compute anti-lock breaking or to do fuel injection, their main function from the point of view of a user is to be driven and to move you from place to place and the computer is just to help that function. For example, The main function of the car is not to compute like anti-lock breaking or to do fuel injection their main function from the point of view of a user is to drive, to move you from place to place. But when we embed software in it then the software can be able for fuel limit detection.

Difference between IoT devices and Computers:

IOT Devices	Computers
IoT devices are special-purpose devices.	Computers are general-purpose devices.
IoT devices can do only a particular task for which it is designed.	Computers can do so many tasks.

IOT Devices	Computers
The hardware and software built-in in the IoT devices are streamlined for that particular task.	The hardware and software built-in in the computers are streamlined to do many tasks(such as calculation, gaming, music player, etc.)
IoT devices can be cheaper and faster at a particular task than computers, as IoT devices are made to do that particular task.	A computer can be expensive and slower at a particular task than an IoT device.
Examples: Music Player- iPod, Alexa, smart cars, etc.	Examples: Desktop computers, Laptops, etc.