* **What is Socket?**

**Answer:** Basically a socket is an internal endpoint of a two way communication link between two programs running on the same network. A socket is attached to a port number so that the TCP (Transmission Control Protocol) layer can identify that very application that the data is destined to be sent to. Sockets are bidirectional, meaning that either side of the connection is capable of both sending and receiving data.

Usually an endpoint is a combination of IP (Internet Protocol) address and port number. Point to be noted that a socket is a virtual thing, not a hardware. Sockets are low-level connections. The client and the server both communicate through a stream of bytes written to the socket. The client and the server must agree on a protocol--that is, they must agree on the language of the information transferred back and forth through the socket.

* **What is Socket Programming ?**

**Answer:** Socket programming is a way of connecting two nodes on a network to communicate with each other. One socket (node) listens on a particular port at an IP, while other socket reaches out to the other to form a connection.

Server forms the listener socket while client reaches out to the server. Socket programs are generally used to communicate between various processes usually running on different systems. It is mostly used to create a client-server environment. Socket programming can be done in many popular programming languages like C, C++, Python, Java. These are some primary socket API functions and methods given below:

* socket() ,
* bind(),
* listen(),
* accept(),
* connect(),
* connect\_ex(),
* send(),
* recv(),
* close()
* **What are the applications of Socket Programming ?**

**Answer:** The applications of socket programming are listed below :

* for creating servers like web servers, mail servers, ftp servers and other servers,
* For establishing communication between two processes,
* mostly used to create a client-server environment.
* for creating clients like browsers.
* for transfering file or message form one computer to another computer.
* for creating any sever, client applications. Like FTP, HTTP, DNS etc.