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**Assignment 2**

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**IoT-Quarter 3**

**Q1. Describe reserved ports and List down reserved ports?**

Port numbers range from 0 to **65535,** but only port numbers 0 to **1023** are reserved for privileged services and designated as well-known ports.

* Port 20 FTP data
* Port 21 FTP control
* Port 22 SSH
* Port 23 Telnet
* Port 25 SMTP
* Port 53 DNS
* Port 80 HTTP
* Port 443 HTTPS

**Q2. List down pros and cons of http protocol?**

Following are **pros of HTTP**:

* It offers lower CPU and memory usage due to less simultaneous connections.
* It enables HTTP pipelining of requests/responses.
* It offers reduced network congestion as there are fewer TCP connections.
* Handshaking is done at the initial connection establishment stage. Hence it offers reduced latency in subsequent requests as there is no handshaking.
* It reports errors without closing the TCP connection.

Following are **cons of HTTP**:

* It can be used for point-to-point connection.
* It is not optimized for mobile.
* It does not have push capabilities.
* It is too verbose.
* It does not offer reliable exchange (without retry logic).
* Client does not close the connection when all the data it needs have been received. Hence Server will not be available during this time period.

Q3. List down client devices and server’s examples?

There are huge number of client devices:

* Mobile phones
* Laptops
* Desktop PCs

Server are followings:

* Application server
* File server
* Database server
* Mail server
* Proxy server
* Web server