APRIL 9

**1.What is a software bug?**

A software bug is **a problem causing a program to crash or produce invalid output**. The problem is caused by insufficient or erroneous logic. A bug can be an error, mistake, defect or fault, which may cause failure or deviation from expected results.

**2.What is Middlware?**

Middleware is a software that acts as an intermediary between two applications or services to facilitate their communication.

**3.What is a webserver?**

A web server is nothing but software and hardware that uses the HTTP, and some other protocols that respond to request from clients made on the World Wide Web. The main job that the webserver performs is to display the content of the website, which it does by storing, then processing, and eventually delivering the web pages to the user who has requested it. The web server also supports Simple Mail Transfer Protocol or SMTP and File Transfer Protocol or FTP and HTTP. These are used to transfer files for emailing and even for storage.

**4.What is a Application server?**

 An application server is a special **[type of server](https://digitalthinkerhelp.com/what-is-server-in-networking-types-examples-functions-and-uses/)** that allows both web apps development and server environment for running them.

Application server is software that is placed on server side, and this software helps to deliver business logic back end of any application. You can says that it is a part of **[network](https://digitalthinkerhelp.com/tutorial-basic-of-computer-network-introduction-what-is-uses-advantages/)** otherwise distributed network.

1. **What is a Load Balancer?**

Load balancing is a core networking solution used to distribute traffic across multiple servers in a serve form.It improves application availability and responsiveness and prevent server overload. Each load balancer sits between client devices and back-end servers,receiving and then distributing incoming requests to any available server capable of fulfilling them.

**6.What is 2-Tier Architecture?**

Two-tier architecture. In a two-tier architecture, **the client is on the first tier.** The database server and web application server reside on the same server machine, which is the second tier. This second tier serves the data and executes the business logic for the web application.

1. **What is 3-Tier Architecture?**

Three-tier architecture is a well-established software application architecture that organizes applications into three logical and physical computing tiers: the presentation tier, or user interface; the application tier, where data is processed; and the data tier, where the data associated with the application is stored and managed.

The chief benefit of three-tier architecture is that because each tier runs on its own infrastructure, each tier can be developed simultaneously by a separate development team, and can be updated or scaled as needed without impacting the other tiers.

**8.What is n-Tier Architecture?**

An N-tier architecture **divides an application into logical layers and physical tiers**. Layers are a way to separate responsibilities and manage dependencies. Each layer has a specific responsibility. A higher layer can use services in a lower layer, but not the other way around.