Assignment 1

Differences between Console application, Client server programming, web based application, Enterprise application

Console application: A console application facilitates the reading and writing of characters from a console - either individually or as an entire line.
A console application usually exists in the form of a stand-alone executable file with minimal or no graphical user interface (GUI).
A console application is primarily designed for the following reasons:

- To provide a simple user interface for applications requiring little or no user interaction, such as command-line utility programs.
- Automated testing, which can reduce automation implementation resources.

Ex: C#

Client server programming: An application that runs on the client side and accesses the remote server for information is called a client/server application.
The client server always makes requests to the remote server to get some information. The user interaction with the server is always through a user interface or application on the client side.
A client server application can be platform specific as well as cross platform depending on the programming language used.
A client server application uses a two-tier architecture.
In client/server applications, the server machine is a host that runs single or multiple-server programs sharing their resources with clients. A client always requests from a server information or content without sharing any of its resources.
Specific types of clients used in a client/server model are web browsers, email clients, and online chat clients.

Web based application: An application that runs entirely on a web browser is known as a web application.
The user interaction in a web application is through a web browser.
A web application is platform independent because they require only a web browser.
Web applications can run on the browsers directly and hence do not require any installation.
A web application uses multi-tier architecture which consists of; user client, middle tier, and application server. A web application uses a single-user system unlike a client server application which uses two users: client and server.
A web application is hosted in a browser-controlled environment, or it is often programmed in a language that supports the browser. JavaScript is the most widely used browser-supported language.
In web applications it is easy to test scripting errors.

Some of the examples of web applications include: Yahoo mail, Gmail, WebOffice, Google Apps, Microsoft Office Live, WebEx, etc.

Enterprise application: An enterprise application (EA) is a large software system platform designed to operate in a corporate environment such as business or government. EAs are complex, scalable, component-based, distributed and mission critical. EA software consists of a group of programs with shared business applications and organizational modeling utilities designed for unparalleled functionalities. EAs are developed using enterprise architecture.
EA software is a critical component of any computer-based information system. EA software ultimately enhances efficiency and productivity through business level support functionality.

Software services include online shopping and payment processing, interactive product catalogs, computerized billing systems, security, content management, IT service management, content switching modules, resource planning, business intelligence, human resource management, manufacturing, application integration, forms automation, sales force automation, enterprise resource planning and business process management.

Addition of 2 numbers in Python :-

```python
a = int(input("enter first number : "))

b = int(input("enter second number: "))

sum = a + b

print("sum:", sum)
```

Addition of 2 numbers in Java :-

```java
import java.util.Scanner;

public class Example

{

    public static void main(String []args)

    {
```

```java
        Scanner kb=new Scanner(System.in);

        System.out.println("Enter two numbers ");

        int a=kb.nextInt();

        int b=kb.nextInt();

        int c = a+b;

        System.out.println("Sum of "+a+"and "+b+"is "+c);

    }

}
```

Hello World Program in HTML :

```html
<html>

<body>

        <h1>Hello World</h1>

        <p>This is paragraph tag</p>

</body>

</html>
```