

Class:

A class is just like a blue print in which entire information of the class will be present.

1. A class is used for creating objects we cannot use class in real world without creating objects to it
2. A class contains methods variables and constructors in java and these are also called as members of class.
3. We can create 'n' no of variables methods and constructors in class.
4. We use "class" key word to create any class.

Object:

1. An object is an instance of a class
2. A object is a real world entity which contains identity and behaviour
3. We can create n number of objects to a class
4. If we create multiple objects to a class and perform operations on one object it does not reflects in the other objects.
5. We can create a object of one class in other class also there is no restriction to it but we can set the access according to the requirements

Constructor:

a constructor is a block of code similar to the method which is called when an object is created.

1. Constructor is used while allocating the memory to the variables of the class.
2. If we do not create any constructor java will automatically creates a constructor which is called default constructor or implicit constructor.
3. A constructor name must and should be of class name only.
4. We can create many no of constructors but same name we should be changing parameters

Control statements:

In Java, control statements are used to control the flow of a program. They determine the order in which statements are executed and enable you to make decisions and perform looping operations. Java has several types of control statements, including:

1. Conditional statements
2. Looping statements
3. Jump statements

Conditional statements:

Conditional statements include

1. If
2. Else
3. Else if

if: The **if** statement is used to make decisions in your code based on a condition. If the condition is true, a block of code is executed

else: The **else** statement is used in conjunction with **if** to specify what code should be executed if the condition is false.

else if: Multiple conditions can be checked using **else if**.

Looping Statements:

for: The **for** loop is used to iterate over a range of values, often used for counting.

while: The **while** loop repeats a block of code as long as a specified condition is true.

do-while: The **do-while** loop is similar to the **while** loop, but it guarantees that the code block is executed at least once before checking the condition.

Jump statements:

break: The **break** statement is used to exit a loop or switch statement prematurely.

continue: The **continue** statement is used to skip the current iteration of a loop and move to the next iteration.