

## OOPS Fundamentals

Q1) How to Create an object?

Ans) by using 'new' keyword an object can be created

```
className object = new className();
```

Q2) What is the use of new keyword?

Ans) new keyword is used to create an instance of the class. In other words, it instantiates a class by allocating memory for a new object and returning a reference to that memory.

Q3) What are different types of Variables in java?

Ans) There are 3 types of Variables

- i) Local - declared within a method or block and are only accessible within that method.
- ii) Instance - declared within a class but outside any method. They have default values.
- iii) Static - declared with static keyword and are associated with the class rather than with any particular instance of a class. have default values.

Q4) In which area memory is allocated for instance Variable and local Variable?

Ans) instance Variable are allocated in heap memory  
local Variable are allocated in stack memory.

Q5) Difference between instance and local variables?

Ans) The main difference is their scope and lifetime.

Instance Variables are declared inside a class but outside any method, Constructor or block. Instance Variables can be accessed and modified by any method of the class.

Local Variables are declared inside a method or block and are only accessible within that method or block.

Q6) What is Method Overloading?

Ans) Method overloading is a feature in object oriented programming where a class can have multiple methods with the same name but with different parameters or arguments.