# **Oops Fundamentals Assignment**

**Q1. How to create an object in java?**

**Ans.** When we create an object in java we have to use a “new” keyword for creating a class. And we have to keep the things in our mind before creating the objects are:-

**What Objects Knows** (denote with variables) **What objects can do** (denote with method)

Example:- if I’m creating an object for test class then I will write in method as :-

**Test obj = new Test();**

**Q2. What is the use of new keyword in java?**

**Ans.** The new keyword is basically used for creating a new object in java.

**Q3. What are the different types of variables in java?**

**Ans.** There are total 3 types of variables in java are:-

* Instance Variables
* Static Variables
* Local Variables

**Q4. What is the difference between Instance variables and local variables?**

**Ans. Instance Variables :-** Instance variables is basically created at the time of object creation and destroyed at the time of objects destruction. Hence the scope of instance variable is exactly the same as scope of objects.

* It is stored on the heap as the part of the object.
* Instance variable is declared always inside the class but outside any method.

**Local Variables:-** Local variables is always declared inside the method.

* It is also stored inside the stack of memory.
* The local variables will be created as the part of the block execution and its destruction is also occurred as the block is destroyed after execution. Hence we can say that the scope of local variables is as the same as scope of block execution.

**Q5. In which area memory is allocated for instance variables and local variables?**

**Ans.** Instance variables is stored on the heap memory as the part of the object.

Local Variables is also stored inside the stack of memory.

**Q6. What is method overloading?**

**Ans.** In simple language we say that we can write or declare various methods of same name in a single code but its parameter , its signature , its quantity , its nature , its combination should be different. But the same things we can’t do in C language. Lack of overloading in “C” increases complexity of the programme.