

30 Jan 2023 OOPs Assignment

Que. 1. How to create an object in Java?

Ans. Using new keyword we create an object or instance of the class.

The syntax for creating an object is :

ClassName object = **new** ClassName();

Que. 2. What is the use of a new keyword in Java?

Ans. The new keyword is used to create an instance of the class.

Que. 3. What are the different types of variables in java?

Ans. There are three types of variables in Java: **Local, Instance, and Static.**

Que. 4. What is the difference between instance and local variables?

Ans. **Instance Variable:** These variables are declared within a class but outside a method, constructor, or block and always get a default value.

- These variables are usually created when we create an object and are destroyed when the object is destroyed.
- We may use an access specifier, for instance, variable, and if no access specifier is specified, then the default access specifier is used.
- Each and every object will have its own copy of instance variables.

Local Variable: These variables are declared within a method but do not get any default value.

- They are usually created when we enter a method or constructor and are destroyed after exiting the block or when the call returns from the method.
- Its scope is generally limited to a method and its scope starts from the line they are declared. Their scope usually remains there until the closing curly brace of the method comes.
- The initialization of the local variable is mandatory.

Que. 5. In which area memory is allocated for instance variable and local variable?

Ans. Local variables are created in the stack. Instance variables are created in the heap & are part of the object they belong to. Reference variables are created in the stack.

Que. 6. What is method overloading?

Ans. If a class has multiple methods having same name but different in parameters, it is known as **Method Overloading.**