

Oops

Assignment Solutions



1. How to create an object in java?

Ans: There are several ways by which we can create objects of a class in java as we all know a class provides the blueprint for objects, you create an object from a class. This concept is under-rated and sometimes proves to be beneficial as this concept is bypassed by many programmers and sometimes even do ask from interview.

Methods:

There are many different ways to create objects in Java. the help of programs to illustrate internal working by which we can create objects in Java.

1. Using new keyword
2. Using new instance
3. Using clone() method
4. Using deserialization
5. Using newInstance() method of Constructor class

Let us discuss them one by one and implement the same by appending a clean java program for the same.

Method 1: Using new keyword

Using the new keyword in java is the most basic way to create an object. This is the most common way to create an object in java. Almost 99% of objects are created in this way. By using this method we can call any constructor we want to call (no argument or parameterized constructors).

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

Ans: The "new" keyword in Java is used to create an instance of an object. It allocates memory to an object and returns a reference to the object created. It is used with a constructor to create an object.

3. What are the different types of variables in Java?

- Static Variables
- Instance Variables
- Local Variable

4. What is the difference between Instance variables and Local variables?

Method	Description
<code>add(Object)</code>	This method is used to add an object to the collection.
<code>addAll(Collection c)</code>	This method adds all the elements in the given collection to this collection.
<code>clear()</code>	This method removes all of the elements from this collection.
<code>contains(Object o)</code>	This method returns true if the collection contains the specified element.
<code>containsAll(Collection c)</code>	This method returns true if the collection contains all of the elements in the given collection.
<code>equals(Object o)</code>	This method compares the specified object with this collection for equality.
<code>isEmpty()</code>	This method returns true if this collection contains no elements.
<code>max()</code>	This method is used to return the maximum value present in the collection.
<code>remove(Object o)</code>	This method is used to remove the given object from the collection. If there are duplicate values, then this method removes the first occurrence of the object.
<code>removeAll(Collection c)</code>	<code>removeAll(Collection c)</code>
<code>size()</code>	This method is used to return the number of elements in the collection.
<code>toArray()</code>	This method is used to return an array containing all of the elements in this collection.

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

Ans: Instance variables are allocated in the heap and local variables are allocated in the stack.

6. What is method overloading?

Ans: Method overloading in Java is a feature that allows a class to have multiple methods with the same name but different parameters. The Java compiler distinguishes these methods by the number, type, and order of parameters. Overloading is used to provide multiple ways to call a method for different use cases, making code more readable and reusable.