1.How to create an Object in java?

Ans: there are some methods to create object in java.

- Using **new** Keyword
- Using **clone()** method
- Using **newInstance()** method of the **Class** class
- Using **newInstance()** method of the **Constructor** class
- Using **Deserialization**

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

Ans: New keyword in Java is used to create an instance of an object that has a constructor function.

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

Ans: Instance variable, Static variable, local variable

4. What is the difference between Instance variable and local variable?

Ans:

Instance Variable	Local Variable
They are defined in class but outside the body of methods.	They are defined as a type of variable declared within programming blocks or subroutines.
These variables are created when an object is instantiated and are accessible to all constructors, methods, or blocks in class.	These variables are created when a block, method or constructor is started and the variable will be destroyed once it exits the block, method, or constructor.

Instance Variable	Local Variable
These variables are destroyed when the object is destroyed.	These variables are destroyed when the constructor or method is exited.
It can be accessed throughout the class.	Its access is limited to the method in which it is declared.
They are used to reserving memory for data that the class needs and that too for the lifetime of the object.	They are used to decreasing dependencies between components I.e., the complexity of code is decreased.
These variables are given a default value if it is not assigned by code.	These variables do not always have some value, so there must be a value assigned by code.
It is not compulsory to initialize instance variables before use.	It is important to initialize local variables before use.
It includes access modifiers such as private, public, protected, etc.	It does not include any access modifiers such as private, public, protected, etc.

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

Ans: for instance variable memory is allocated in Heap and for local variable memory is allocated for Stack.

6. What is method overloading?

Ans: Method overloading in java is a feature that allows a class to have more than one method with the same name, but with different parameters. Java supports method overloading through two mechanisms: By changing the number of parameters.