1. **How to Create an Object in Java?**

Ans In Java, We can create an object using the new keyword followed by the class name and parentheses. For example:

```
MyClass obj = new MyClass();
```

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

Ans The new keyword is used to dynamically allocate memory for an object at runtime. It initializes the object and returns a reference to it.

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

Ans In Java, there are three types of variables:

- **Instance variables**: Associated with an instance (object) of a class.
- **Local variables**: Declared within a method or block and have limited scope.
- **Static variables**: Shared across all instances of a class.

4. **Difference between Instance variable and Local variables:**

Ans

- **Instance variables**:
  - Belong to an object (instance) of the class.
  - Exist throughout the object's lifetime.
  - Initialized with default values (e.g., int to 0, String to null).
- **Local variables**:
  - Declared within a method or block.
  - Have limited scope (within the method or block).
  - Must be explicitly initialized before use.

5. **Where is memory allocated for instance variables and local variables?**

Ans

- **Instance variables**: Memory is allocated on the heap when an object is created.
- **Local variables**: Memory is allocated on the stack when the method is called.

6. **What is method overloading?**

Ans Method overloading allows defining multiple methods with the same name in a class, but with different parameter lists (different number or types of parameters). The compiler selects the appropriate method based on the arguments provided.