For Example:

Class: Human	**Object**: Man, Woman	**Class**: Mobile phone	**Object**: iPhone, Samsung, Moto
Class: Fruit	**Object**: Apple, Banana, Mango, Guava	**Class**: Food	**Object**: Pizza, Burger, Samosa

41. StringBuffer and StringBuilder?

- The main difference is StringBuffer is synchronized while StringBuilder is non-synchronized. So, StringBuilder can be called simultaneously. And this makes StringBuilder more efficient.
- StringBuffer is synchronized, StringBuilder is non-synchronized
- StringBuilder is more efficient than StringBuffer
- Constructor;
    - StringBuilder() → created an empty string with the initial **capacity of 16**.
    - StringBuilder(str str) → created an StringBuilder the specified string.
    - StringBuilder(int length) → created an empty string with the specified capacity as length.
- Method;
    - StringBuilder str = new StringBuilder(“Hello”);
    - str.append(“Java”); → //Hello Java
    - str.insert(1,“Java”); → //HJavaello
    - str.replace(1,3,“Java”); → //HJavalo
    - str.delete(1,3); → //Hlo
    - str.reverse(); → //olleH

```
string str = “Hello”;
string reversed = “ ”;

for (int i = str.length()-1; i>=0 ; i--){
   reversed += str.charAt(i);
}
sysout(reversed);
```

42. What is finalize()?

- finalize() method is a protected and non-static method of java.lang.Object class.
- This method is available in all objects that we create in java.
- This method is used to perform some final operations or clean-up operations on an object before it is removed from the memory.
- We can also override the finalize() method to keep those operations we want to perform before an object is destroyed. It can be called. object.finalize();

43. What is final keyword?

- final keyword is used with Class to make sure no other class can extend it, for example String class is final and we can’t extend it.
- We can use the final keyword with methods to make sure child classes can’t override it.
- final keyword can be used with variables to make sure that it can be assigned only once. However, the state of the variable can be changed, for example, we can assign a final variable to an object only once, but the object variables can change later on.
- Java interface variables are by default final and static.

44. What is static keyword?

- static keyword can be used with class level variables to make it global i.e all the objects will share the same variable.
- static keyword can be used with methods also. A static method can access only static variables of class and invoke only static methods of the class.