Q1. Write Difference between Abstract class and interfaces

| Abstract Class | Interface |
|---|---|
| Abstract class can have abstract and non-abstract methods. | Interface can have only abstract methods. |
| Abstract class can provide the implementation of interface. | Interface can't provide the implementation of abstract class. |
| An abstract class can be extended using keyword "extends". | An interface can be implemented using keyword "implements". |

Q2. What is method overriding?

Method overriding is a process of overriding base class method by derived class method with more specific definition. Method overriding is also referred to as runtime polymorphism because calling method is decided by JVM during runtime.

Q3. What is method overloading?

Method overloading is a concept that allows to declare multiple methods with same name but different parameters in the same class.

Q5. What is the basic difference between method and constructor?

| Method | Constructor |
|---|------------------------------------|
| Constructors are invoked implicitly | Methods are invoked explicitly. |
| Constructor does not return any value | Method may/may not return a value. |
| If constructor is not present, a default constructor is provided by java compiler | No default method is provided. |

Q6. What is callByRef and callByValue

| Call by Reference | Call by Value |
|--|--|
| Calling a method with a parameter as a reference is known as Call by Reference | Calling a method with a parameter as a value is known a Call by Value |
| The arguments reference is passed to the parameter. | The argument value is passed to the parameter. |
| We can have access to an access to the actual variables. | The changes made to the other variables in the called function have no effect on the values of actual variables in the calling function. |

Q7. How String manage its Memory?

JVM divides the allocated memory to a Java program into two parts. one is Stack and another one is heap. Stack is used for execution purpose and heap is used for storage purpose. In that heap memory, JVM allocates some memory specially meant for string literals. This part of the heap memory is called String Constant Pool. Whenever you create a string object using string literal, that object is stored in the string constant pool and whenever you create a string object using new keyword, such object is stored in the heap memory.

