Assignment

1.In System.out.println what is how it refers to System class

System: It is a final class defined in the java. lang package. out: This is an instance of PrintStream type, which is a public and static member field of the System class. println(): As all instances of PrintStream class have a public method println(), hence we can invoke the same on out as well.

2.Constructor chaining

Constructor chaining is the process of calling one constructor from another constructor with respect to current object. Constructor chaining can be done in two ways: Within same class: It can be done using this() keyword for constructors in same class.

3.Difference between hash set and hash map

Difference between HashMap and HashSet

HashSet is an implementation of Set Interface which does not allow duplicate value. The main thing is, objects that are stored in HashSet must override equals() for check for equality, and hashCode() methods for no duplicate value are stored in our set. HashMap is an implementation of Map Interface, which maps a key to value. Duplicate keys are not allowed in a Map. Basically, Map Interface has two implementation classes HashMap and TreeMap the main difference is TreeMap maintains an order of the objects but HashMap will not.HashMap allows null values and null keys. Both HashSet and HashMap are not synchronized.

4.In multithreading where can we use to define explicit threads.

Multithreading in Java is a process of executing multiple threads simultaneously.A thread is a lightweight sub-process, the smallest unit of processing. Multiprocessing and multithreading, both are used to achieve multitasking.

However, we use multithreading than multiprocessing because threads use a shared memory area. They don't allocate separate memory area so saves memory, and context-switching between the threads takes less time than process.

5. Difference between String Builder and StringBuffer

1) StringBuffer is synchronized i.e. thread safe. It means two threads can't call the methods of StringBuffer simultaneously. StringBuilder is non-synchronized i.e. not thread safe. It means two threads can call the methods of StringBuilder simultaneously.

2) StringBuffer is less efficient than StringBuilder. StringBuilder is more efficient than StringBuffer.