

1. Why do we need static keywords in java

Explain with an example.

Ans: The static keywords are used for memory management in java,

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Ex: class Person{
    static int age;
}
class Main{
    public static void main(String args[]){
        Person p1 = new Person();
        Person p2 = new Person();
        p1.age = 30;
        p2.age = 31;
        Person.age = 32;
        System.out.println("P1 age is: " + p1.age);
        System.out.println("P2 age is: " + p2.age);
    }
}
```

2. What is class loading and how does the java program actually execute?

Ans: the java classloader is a part of the java runtime environment that dynamically

loads java classes into the java virtual machine.

3. Can we make a local variable as static

Ans: yes, we can make a local variable as static.

4. Why is the static block executed before the primary method in java?

Ans: The static blocks always execute first before the main()the method in Java because the compiler stores them in memory at the time of class loading and before the object creation.

5. Why is a static method also called a class method?

Ans: A static method is a method that belongs to a class rather than an instance of a class

5. What is the use of static blocks in java?

Ans: Static block is used for changing the the default value of static variables, initializing static variables of the class, write a set of codes that you want to execute during the class loading in memory in java.

7. Difference between static and instance variables

Ans: Instance variables are created when an object is made with the use of

the keyword 'new' and destroyed when the thing is destroyed.

Static variables

are created when the program starts and destroyed when the program stops.

Instance variables can be accessed directly by calling the variable name inside the class.

8. Difference between static and nonstatic members

Ans: Static variables are shared among all instances of a class.

Non-static variables are specific to that instance of a class.