Core Java

UNIT II

Fill in the blanks

this Keyword used to refer to current object of a class.

Static Variables are called as Class Variables.

Static methods are referenced by the class.

Static variables will get memory at the time of Class Loading .

Identify the output of the code

```
public class StaticDemo {
        int num1 = 6;
        static int num2 = 10;
    public static void main(String args[]) {
        StaticDemo s1 = new StaticDemo();
        StaticDemo s2 = new StaticDemo();
        s1.num1 = 15;
        s1.num2 = 17;
        s2.num1 = 22;
        s2.num2 = 28;
        System.out.println(s1.num1 + " " + s1.num2 + "
" + s2.num1 + " "+ s2.num2);
  }
}
```

Output

15 28 22 28

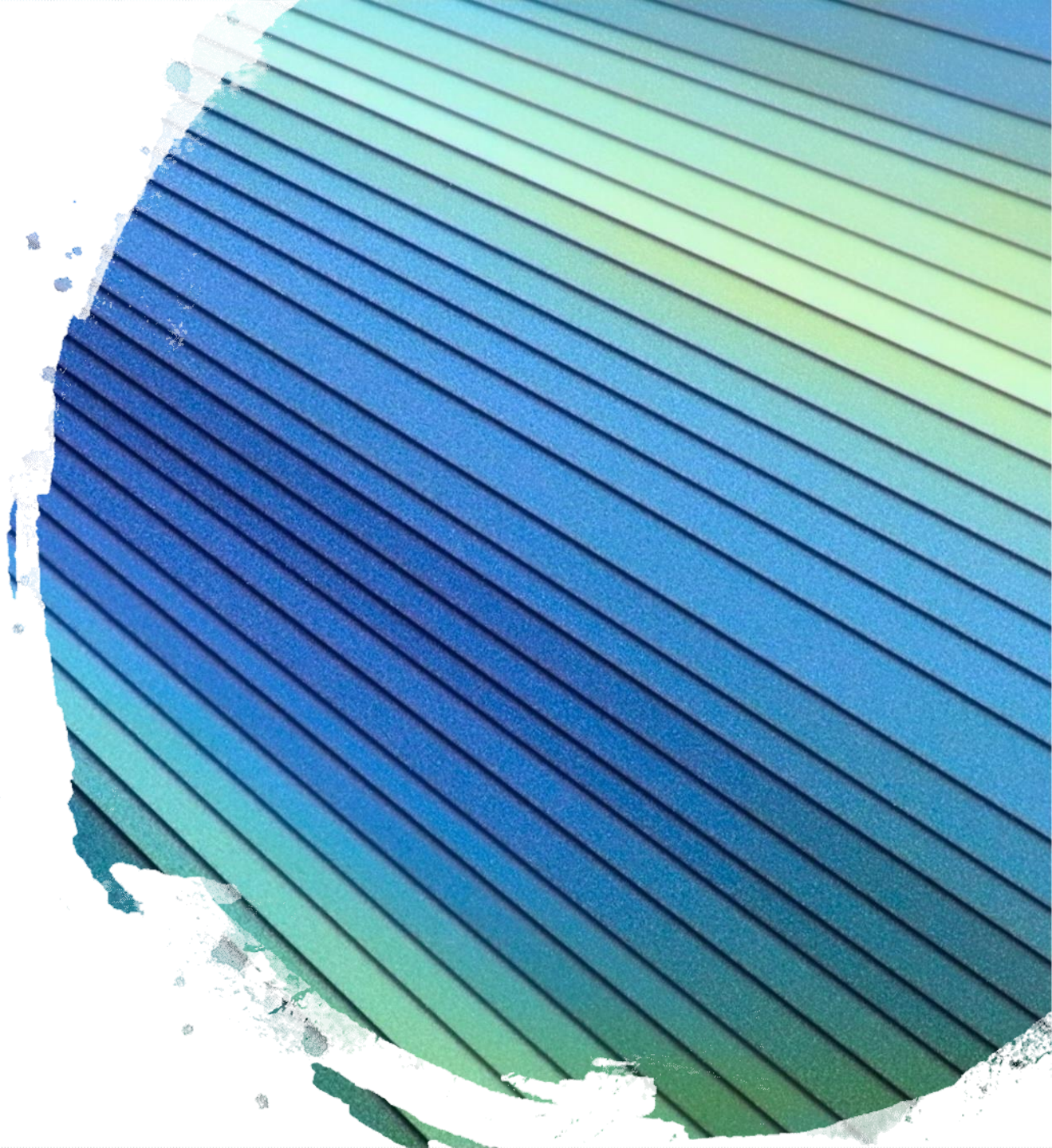
Identify the output of the code

```
public class Main {
  static  int x = 10;
public static void main(String[] args)
    {
       System.out.println(Main.x);
    }
    static
    {
       int x = 20;
       System.out.print(x + " ");
    }
}
```

Output:-
20 12

Learning Outcomes

- Nesting of Methods
- Garbage Collection



Nesting of Methods

- A method can be called by using only its name by another method of the same class. This is known as **nesting of methods.**
- Example

```
class Nesting
{
    int m,n;

   int largest()
   {
            if(m>=n)
            return m;
            else
            return n;
   }
   void display()
   {
            int large=largest();              //calling a method
            System.out.println("Largest value="+large);
   }
}
```

Garbage Collection

- When no references to an object exist, that object is assumed to be no longer needed, and the memory occupied by the object can be reclaimed. There is no explicit need to destroy objects as in C++.

- Garbage collection only occurs sporadically (if at all) during the execution of your program. It will not occur simply because one or more objects exist that are no longer used.

The finalize( ) Method

- Sometimes an object will need to perform some action when it is destroyed. For example, if an object is holding some non-Java resource such as a file handle or character font, then you might want to make sure these resources are freed before an object is destroyed.
- To handle such situations, Java provides a mechanism called finalization.
- The Java run time calls the method finalize() whenever it is about to recycle an object of that class.

Method Declaration

```
protected void finalize( )
{
// finalization code here
}
```

gc() method

- The gc() method is used to invoke the garbage collector to perform cleanup processing.
- The gc() is found in System and Runtime classes.
- Garbage collection is performed by a daemon thread called Garbage Collector(GC).
- This thread calls the finalize() method before object is garbage collected.

Video Link: https://www.youtube.com/watch?v=Dg9raTR8Sts

THANK YOU