PRACTICAL: 11

Aim:- Write programs in Java to use Wrapper class of each primitive data types

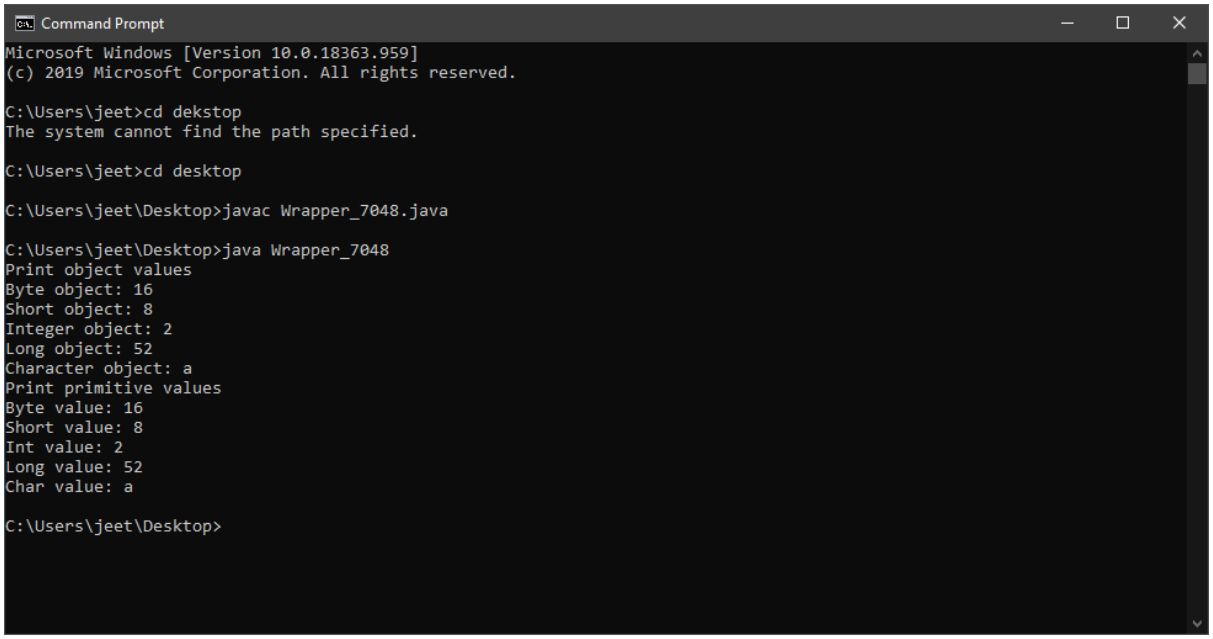
Wrapper class:- A Wrapper class is a class whose object wraps or contains a primitive data types. When we create an object to a wrapper class, it contains a field and in this field, we can store a primitive data types. In other words, we can wrap a primitive value into a wrapper class object. Need of Wrapper Classes.

PROGRAM:

```
public class Wrapper_7048
 {
public static void main(String args[])
{
 byte b=16;
 short s=8;
 int i=2;
long l=52;
 char c='a';
Byte byteobj=b;
Short shortobj=s;
Integer intobj=i;
 Long longobj=l;
Character charobj=c;
 System.out.println("Print object values");
 System.out.println("Byte object: "+byteobj);
 System.out.println("Short object: "+shortobj);
 System.out.println("Integer object: "+intobj);
 System.out.println("Long object: "+longobj);
 System.out.println("Character object: "+charobj);
 byte bytevalue=byteobj;
 short shortvalue=shortobj;
```

```
 int intvalue=intobj;
 long longvalue=longobj;
char charvalue=charobj;
System.out.println("Print primitive values");
 System.out.println("Byte value: "+bytevalue);
System.out.println("Short value: "+shortvalue);
System.out.println("Int value: "+intvalue);
 System.out.println("Long value: "+longvalue);
System.out.println("Char value: "+charvalue);
 } }
```

Output:



PRACTICAL: 12

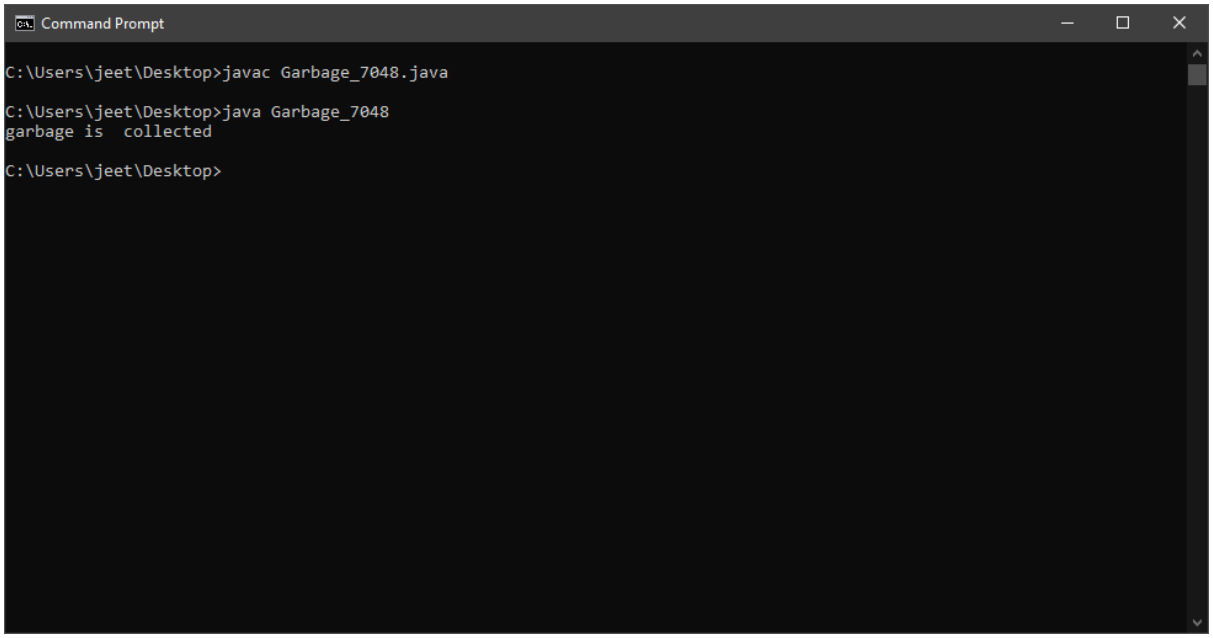
Aim:- WAP which use the concepts of Garbage Collection in JAVA.

Garbage Collection:-Java garbage collection is the process by which Java programs perform automatic memory management. Java programs compile to bytecode that can be run on a Java Virtual Machine, or JVM for short. When Java programs run on the JVM, objects are created on the heap, which is a portion of memory dedicated to the program.

PROGRAM:

```
public class Garbage_7048
{
public void finalize()
{
System.out.println("garbage is  collected");
}
public static void main(String args[])
{
Garbage_7048 s1=new Garbage_7048();
Garbage_7048 s2=new Garbage_7048();
s1=null;
s2=null;
System.gc();
}
}
```

OUTPUT:


Command Prompt
C:\Users\jeet\Desktop>javac Garbage_7048.java
C:\Users\jeet\Desktop>java Garbage_7048
garbage is collected
C:\Users\jeet\Desktop>

PRACTICAL:13

AIM: Write a static block which will be executed before main( ) method in a class.

STATIC: It Is used to initialize the static data member.

It is executed before the main method at the time of class loading. See the example.

PROGRAM:

```
class p13_7048
{
   static{
      System.out.println("this is static block");
   }
   public static void main(String[] args)
   {
      System.out.println("this is main block");
   }
}
```

OUTPUT: