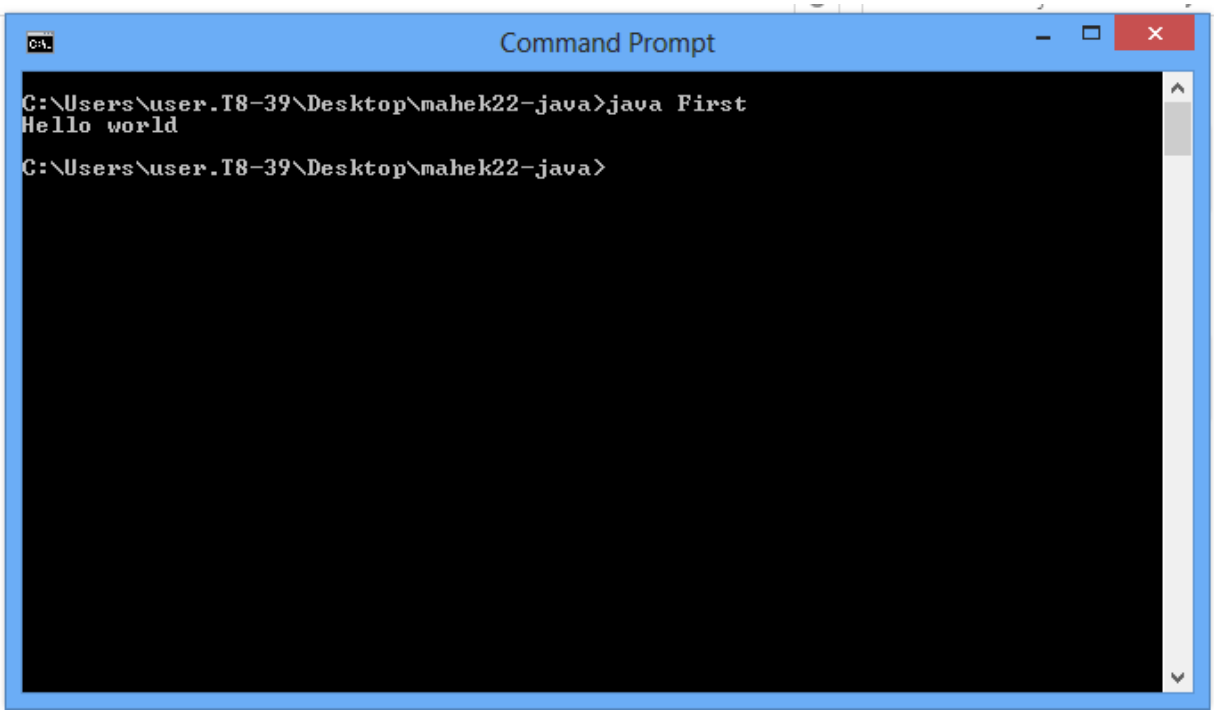
Practical:1[A]

Aim: Write a Simple Java Program that would print the words "HelloWorld".

Code:

```
class First{
        public static void main(String[]
        args){System.out.println("Hello
        world");
        }
}
```

Output:



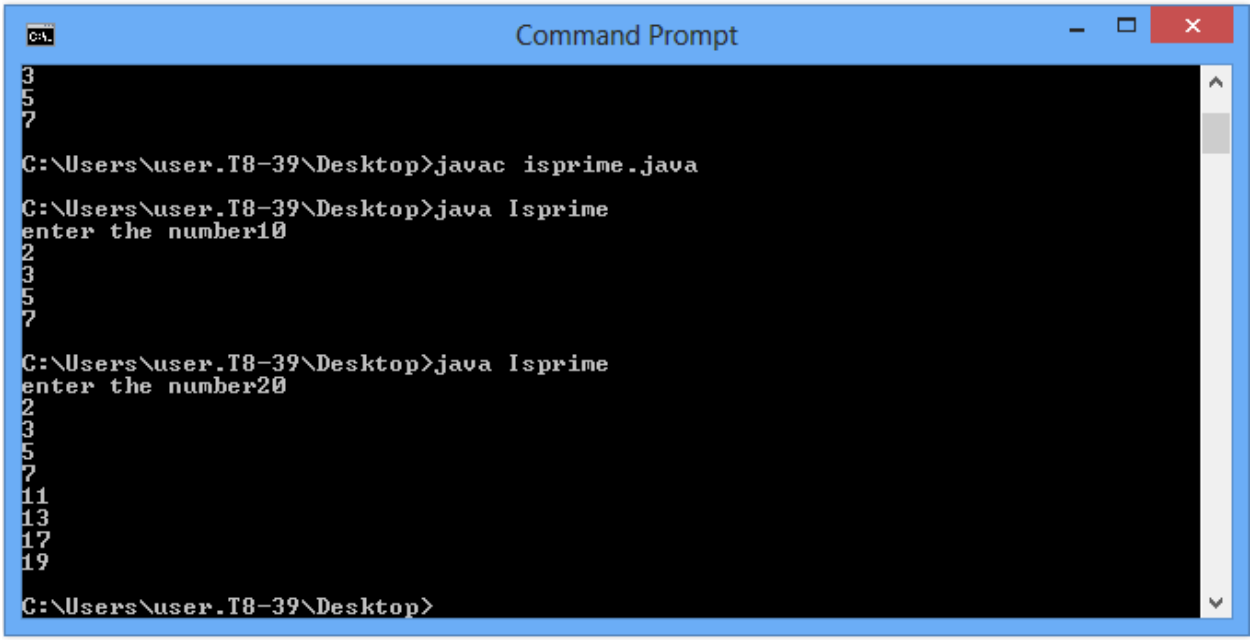
Practical:1[B]

Aim: Write a program in Java to generate first n prime numbers.

Code:

```
import java.util.Scanner;
class Isprime
{
  public static void main(String[] args)
  {
    int i,j,count,n;
    Scanner sc=new Scanner(System.in);
    System.out.print("enter the number");
    n=sc.nextInt();
    for(i=1;i<=n;i++)
    {
      count=0;
      for(j=1;j<=i;j++)
      {
          if(i%j==0)
          count++;
      }
    if(count==2)
    System.out.println(i);
   }
}
}
```

Output:


Command Prompt
3
5
7
C:\Users\user.T8-39\Desktop>javac isprime.java
C:\Users\user.T8-39\Desktop>java Isprime
enter the number10
2
3
5
7
C:\Users\user.T8-39\Desktop>java Isprime
enter the number20
2
3
5
7
11
13
17
19
C:\Users\user.T8-39\Desktop>

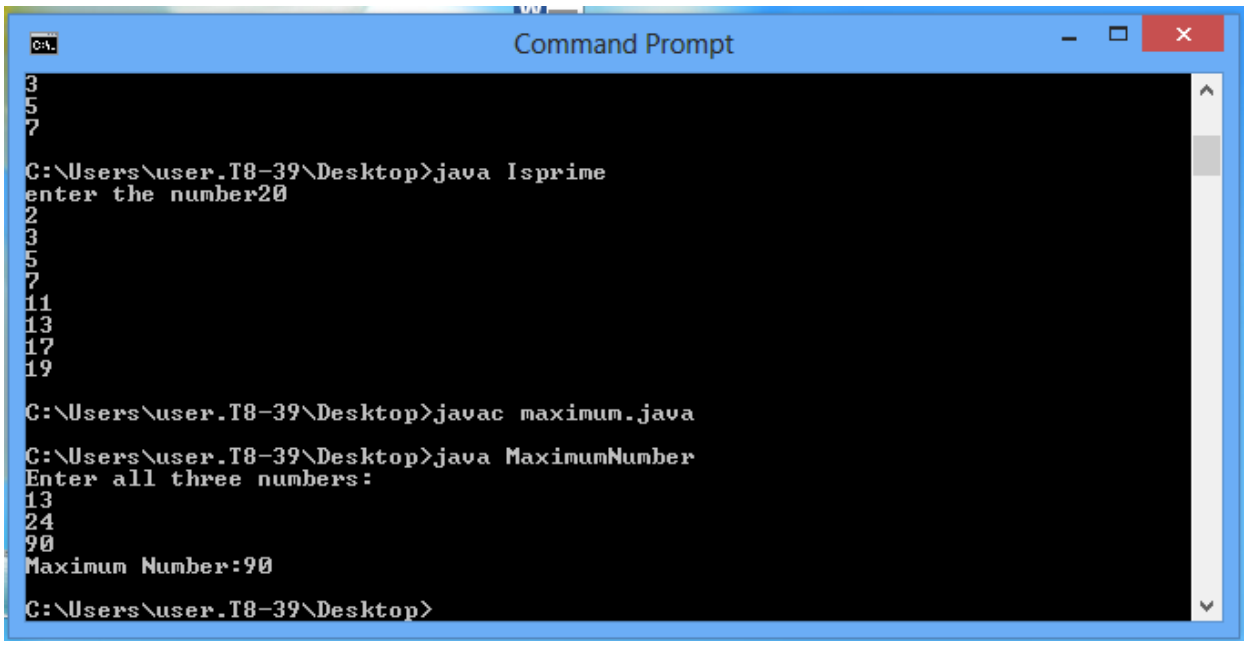
Practical:1[C]

Aim: Write a program in Java to find maximum of three numbers using conditional operator.

Code:

```
import java.util.Scanner;
class MaximumNumber
{
   public static void main(String[] args)
   {
      int a, b, c, d;
      Scanner s = new Scanner(System.in);
      System.out.println("Enter all three numbers:");
      a = s.nextInt();
      b = s.nextInt();
      c = s.nextInt();
      d = c > (a > b ? a : b) ? c : ((a > b) ? a : b);
      System.out.println("Maximum Number:"+d);
   }
}
```

Output:



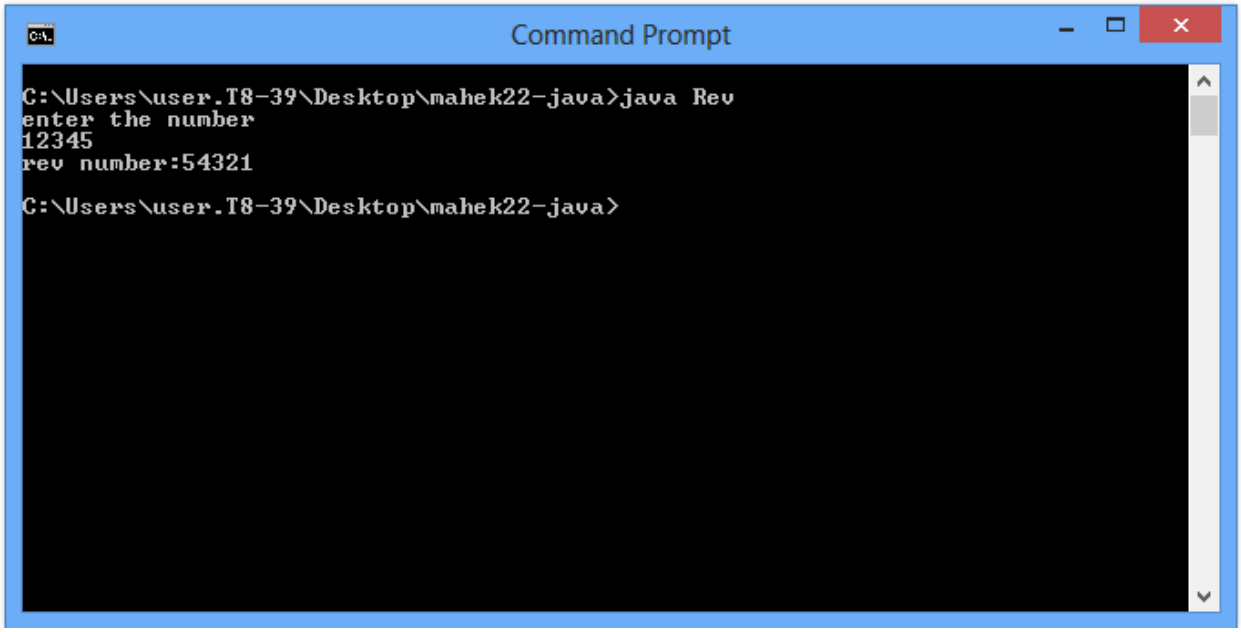
Practical:1[D]

Aim: Write a program in Java to reverse the digits of a number using while loop

Code:

```
import java.util.Scanner;
class Rev{
  public static void main(String []args)
  {
    int num,reversed=0;
    Scanner sc=new Scanner(System.in);
    System.out.println("enter the number");
    num=sc.nextInt();
    while(num !=0)
    {
     int digit=num%10;
     reversed=reversed*10 + digit;
     num/=10;
    }
    System.out.println("rev number:"+ reversed);
  }
}
```

Output:



Practical:2[A]

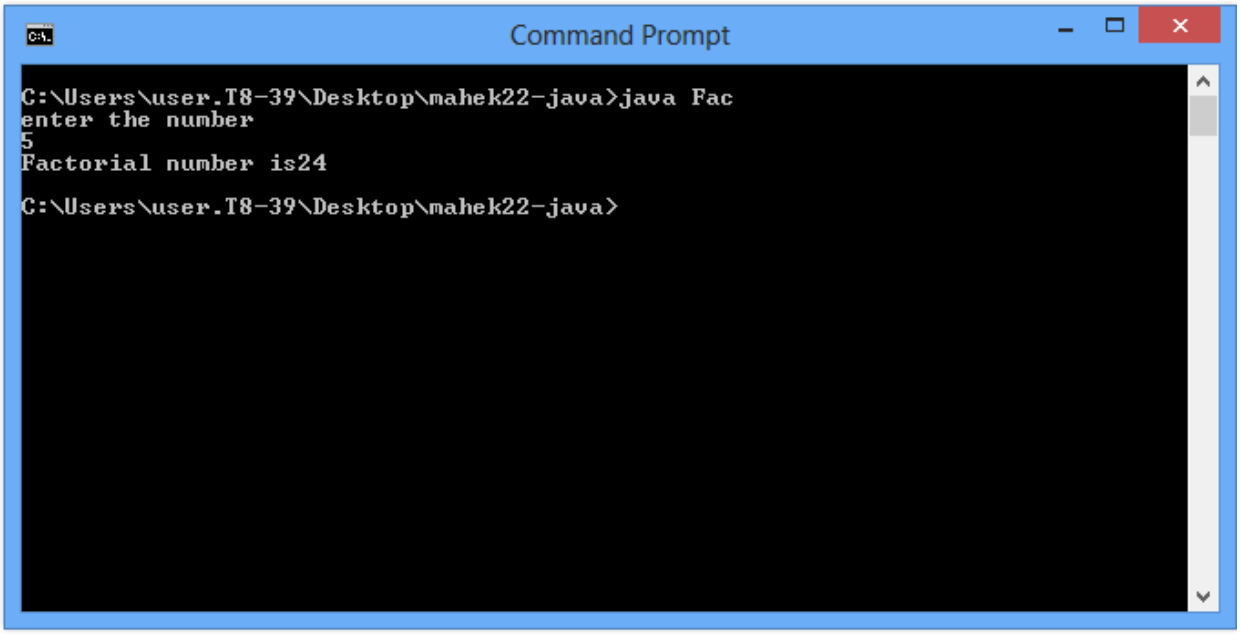
Aim: Write a Java Program that will display Factorial of the given number.

Code:

```
import java.util.Scanner;
class Fac
{
  public static void main(String[] args)
  {
    int i,number,fact=1;
    Scanner sc=new Scanner(System.in);
    System.out.println("enter the number");
    number=sc.nextInt();

    for(i=1;i<number;i++)
    {
      fact=fact*i;
    }
    System.out.println("Factorial number is"+fact);
  }
}
```

Output:



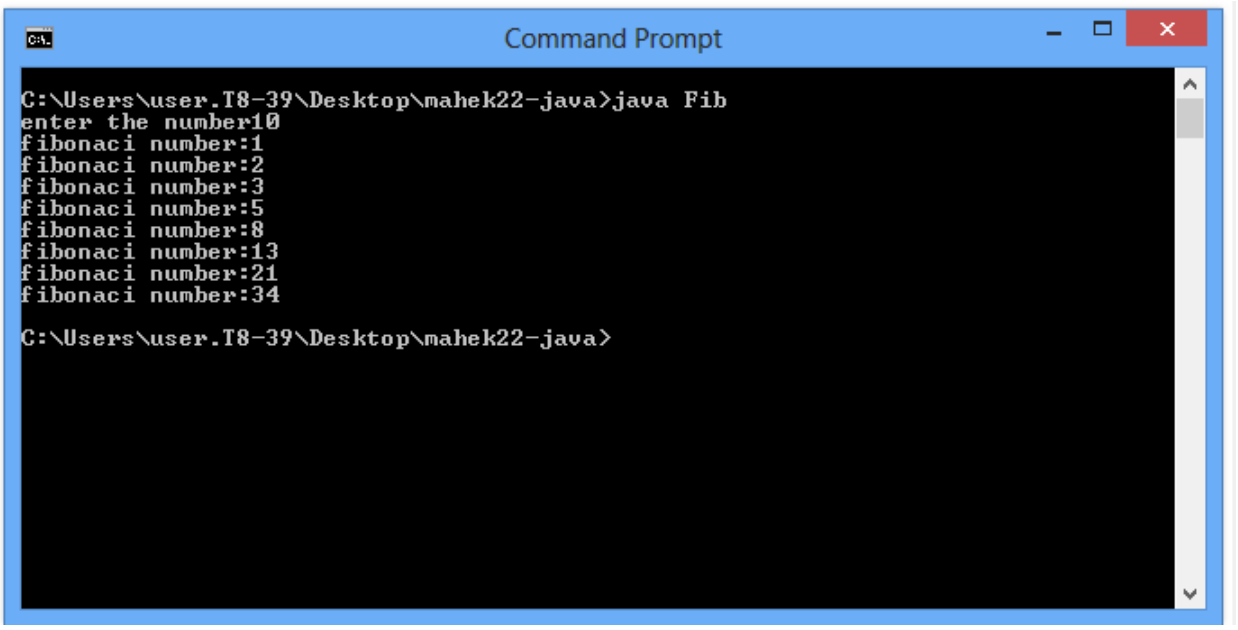
Practical:2[B]

Aim: Write a Program which Generate Fibonacci Series.

Code:

```
import java.util.Scanner;
class Fib
{
   public static void main(String[] args)
   {
     int n1=0,n2=1,n3,i,count;
     Scanner sc=new Scanner(System.in);
     System.out.print("enter the number");
     count=sc.nextInt();
     for(i=2;i<count;++i)
     {
       n3=n2+n1;
       System.out.println("fibonaci number:"+n3);
       n1=n2;
       n2=n3;
     }
   }
}
```

Output:


Command Prompt
C:\Users\user.T8-39\Desktop\mahek22-java>java Fib
enter the number10
fibonaci number:1
fibonaci number:2
fibonaci number:3
fibonaci number:5
fibonaci number:8
fibonaci number:13
fibonaci number:21
fibonaci number:34
C:\Users\user.T8-39\Desktop\mahek22-java>

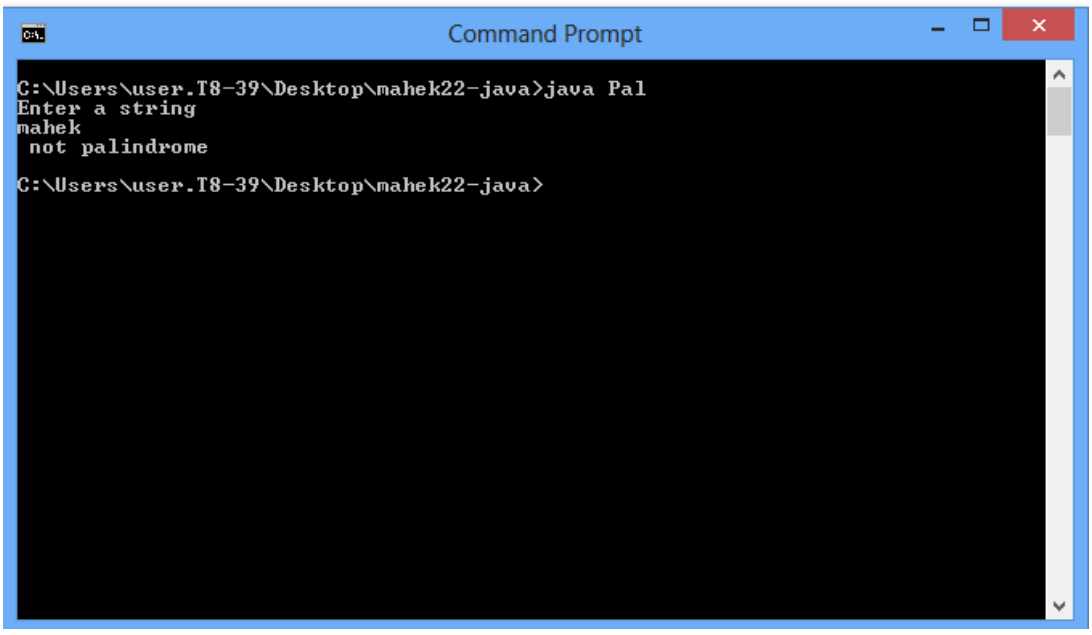
Practical:2[C]

Aim: Write a program to check given number is palindrome or not.

Code:

```
import java.util.Scanner;
class Pal
{
  public static void main(String args[])
  {
    String original, reverse = "";
    Scanner in = new Scanner(System.in);
   System.out.println("Enter a string");
   original = in.nextInt();
    int length = original.length();
    for ( int i = length - 1; i >= 0; i-- )
      reverse = reverse + original.charAt(i);
    if (original.equals(reverse))
      System.out.println("palindrome");
    else
      System.out.println(" not palindrome");
  }
}
```

Output:



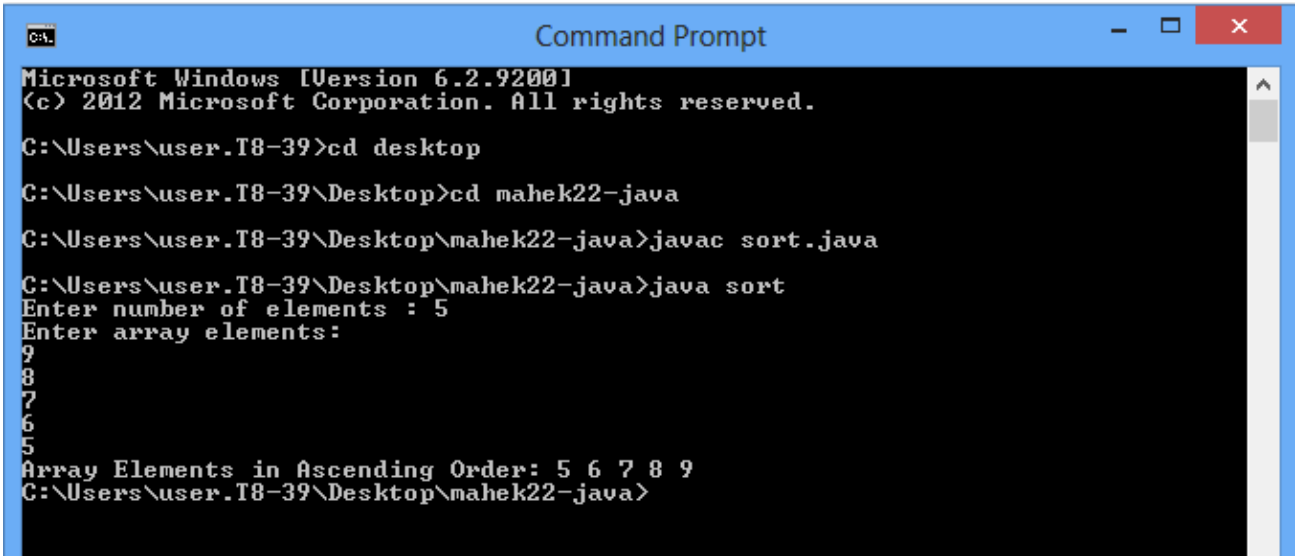
Practical:2[D]

Aim: Write a Java Program to sort 5 number using array.

Code:

```
import java.util.Scanner;
class sort
{
   public static void main(String[] args)
   {
          int count, temp;
      Scanner sc = new Scanner(System.in);
      System.out.print("Enter number of elements : ");
      count = sc.nextInt();
      int num[] = new int[count];
      System.out.println("Enter array elements:");
      for (int i = 0; i < count; i++)
      {
         num[i] = sc.nextInt();
      }
      sc.close();
      for (int i = 0; i < count; i++)
      {
         for (int j = i + 1; j < count; j++) {
            if (num[i] > num[j])
            {
               temp = num[i];
               num[i] = num[j];
               num[j] = temp;
            }
         }
      }
      System.out.print("Array Elements in Ascending Order: ");
      for (int i = 0; i < count - 1; i++)
      {
         System.out.print(num[i] + " ");
      }
     System.out.print(num[count - 1]);
   }
}
```

Output:


Command Prompt
Microsoft Windows [Version 6.2.9200]
(c) 2012 Microsoft Corporation. All rights reserved.
C:\Users\user.T8-39>cd desktop
C:\Users\user.T8-39\Desktop>cd mahek22-java
C:\Users\user.T8-39\Desktop\mahek22-java>javac sort.java
C:\Users\user.T8-39\Desktop\mahek22-java>java sort
Enter number of elements : 5
Enter array elements:
9
8
7
6
5
Array Elements in Ascending Order: 5 6 7 8 9
C:\Users\user.T8-39\Desktop\mahek22-java>

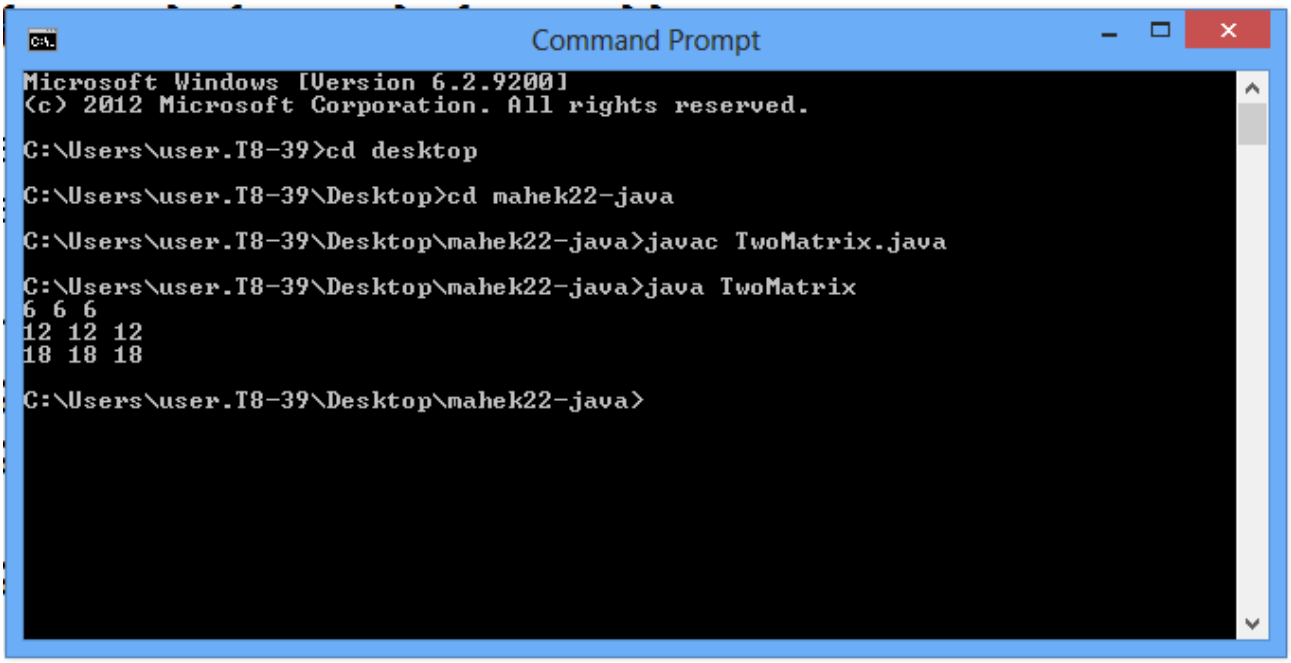
Practical:3[A]

Aim:write a program in java to ultiply two matrix

Code:

```
public class TwoMatrix{
public static void main(String args[]){
int a[][]={{1,1,1},{2,2,2},{3,3,3}};
int b[][]={{1,1,1},{2,2,2},{3,3,3}};
int c[][]=new int[3][3];  //3 rows and 3 columns
for(int i=0;i<3;i++){
for(int j=0;j<3;j++){
c[i][j]=0;
for(int k=0;k<3;k++)
{
c[i][j]+=a[i][k]*b[k][j];
}//end of k loop
System.out.print(c[i][j]+" ");
}//end of j loop
System.out.println();//new line
}
}}
```

Output:



Practical:3[B]

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

Code:

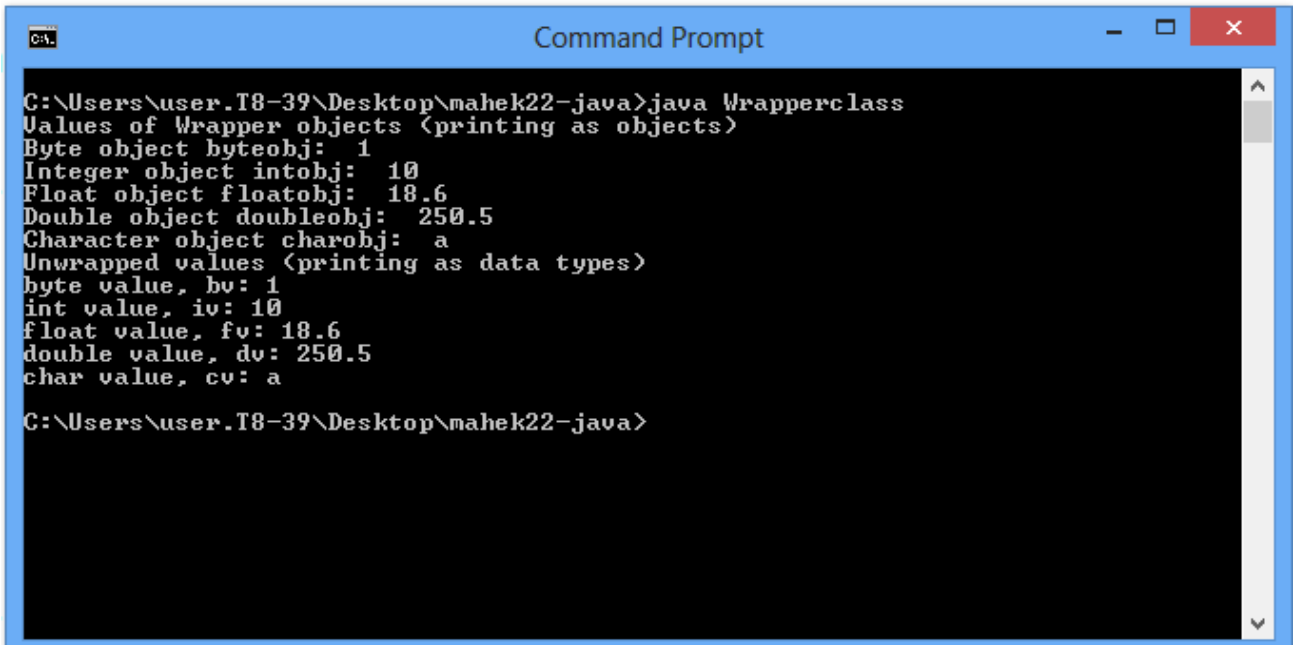
```
class Wrapperclass
{
   public static void main(String args[])
   {
      byte a = 1;
      Byte byteobj = new Byte(a);
      int b = 10;
      Integer intobj = new Integer(b);
      float c = 18.6f;
      Float floatobj = new Float(c);
      double d = 250.5;
      Double doubleobj = new Double(d);
      char e='a';
      Character charobj=e;


      System.out.println("Values of Wrapper objects (printing as objects)");
      System.out.println("Byte object byteobj:  " + byteobj);
      System.out.println("Integer object intobj:  " + intobj);
      System.out.println("Float object floatobj:  " + floatobj);
      System.out.println("Double object doubleobj:  " + doubleobj);
      System.out.println("Character object charobj:  " + charobj);

      byte bv = byteobj;
      int iv = intobj;
      float fv = floatobj;
      double dv = doubleobj;
      char cv = charobj;

      System.out.println("Unwrapped values (printing as data types)");
      System.out.println("byte value, bv: " + bv);
      System.out.println("int value, iv: " + iv);
      System.out.println("float value, fv: " + fv);
      System.out.println("double value, dv: " + dv);
      System.out.println("char value, cv: " + cv);
   }
}
```

Output:


Command Prompt
C:\Users\user.T8-39\Desktop\mahek22-java>java Wrapperclass
Values of Wrapper objects (printing as objects)
Byte object byteobj: 1
Integer object intobj: 10
Float object floatobj: 18.6
Double object doubleobj: 250.5
Character object charobj: a
Unwrapped values (printing as data types)
byte value, bv: 1
int value, iv: 10
float value, fv: 18.6
double value, dv: 250.5
char value, cv: a
C:\Users\user.T8-39\Desktop\mahek22-java>

Practical:4[A]

Aim: Write a program to read five integer numbers from command line and display their sum and average.

Code:

```
import java.util.Scanner;
public class Sumandavg {
 public static void main(String[] args)

{
   int i,n=0,s=0;
         double avg;
         {

      System.out.println("Input the 5 numbers : ");

         }
                  for (i=0;i<5;i++)
                  {
                     Scanner in = new Scanner(System.in);
                     n = in.nextInt();

                  s +=n;
         }
         avg=s/5;
         System.out.println("The sum of 5 no is : " +s+"\nThe Average is : " +avg);
 }}
```

Output:

```
C:\Users\user.T8-39\Desktop\mahek22-java>javac Sumandavg.java

C:\Users\user.T8-39\Desktop\mahek22-java>java Sumandavg
Input the 5 numbers :


5
6
7
8
9
The sum of 5 no is : 35
The Average is : 7.0

C:\Users\user.T8-39\Desktop\mahek22-java>
```

Practical:4[B]

Aim: Write a program to read two strings from command line argument and check the equality of two strings.

Code:

```
public class Str {

   public static void main(String[] args) {
      String style = new String("Bold");
      String style2 = new String("Bold");

      if(style.equals(style2))
         System.out.println("Equal");
      else
         System.out.println("Not Equal");
   }
}
```

Output: