```
//1.WAJP to find the biggest of three numbers by using else if statement
import java.util.*;
class Biggest34
 {
   public static void main(String[] args)
    {
      Scanner sc=new Scanner(System.in);
      System.out.print("Enter the 1st number: ");
      int n1=sc.nextInt();
          System.out.print("Enter the 2nd number: ");
      int n2=sc.nextInt();
          System.out.print("Enter the 3rd number: ");
      int n3=sc.nextInt();
           if(n1>n2&&n1>n3)
           {
             System.out.print("Biggest number is: "+n1);
           }
           else if(n2>n3)
           {
             System.out.print("Biggest number is: "+n2);
           }
           else
           {
            System.out.print("Biggest number is: "+n3);
           }
    }
 }
```

```
//2.WAJP to find the biggest of four numbers by using else if statement
import java.util.*;
class Biggest34
 {
   public static void main(String[] args)
    {
      Scanner sc=new Scanner(System.in);
      System.out.print("Enter the 1st number: ");
      int n1=sc.nextInt();
          System.out.print("Enter the 2nd number: ");
      int n2=sc.nextInt();
          System.out.print("Enter the 3rd number: ");
      int n3=sc.nextInt();
          System.out.print("Enter the 4th number: ");
      int n4=sc.nextInt();
           if(n1>n2&&n1>n3&&n1>n4)
           {
             System.out.print("Biggest number is: "+n1);
           }
```

```
           else if(n2>n3&&n2>n4)
           {
             System.out.print("Biggest number is: "+n2);
           }
           else if(n3>n4)
           {
            System.out.print("Biggest number is: "+n3);
                }
                else
           {
            System.out.print("Biggest number is: "+n4);
                }
    }
 }
```

```
//3.WAJP that takes a year from user and print whether that year ia a leap year or
not
import java.util.*;
class CheckLeapYear
 {
   public static void main(String[] args)
    {
      Scanner sc=new Scanner(System.in);
      System.out.print("Enter the a year: ");
      int n=sc.nextInt();
          if(n%4==0)
          {
                  System.out.println(n+" is a leap year");
          }
          else
          {
                 System.out.println(n+" is not a leap year");
          }
        }
 }
```

```
//4.WAJP that take a character as user input and check whether the character is an
alphabet or not.
import java.util.*;
class CheckAlphabet
 {
   public static void main(String[] args)
    {
      Scanner sc=new Scanner(System.in);
```

```
      System.out.print("Enter the a character: ");
      char c=sc.next().charAt(0);
          if((c>='a'&&c<='z')||(c>='A'&&c<='Z'))
          {
                  System.out.println(c+" is An Alphabet");
          }
          else
          {
                 System.out.println(c+" is not An Alphabet");
          }
        }
 }
```

```
//5.WAJP that take a character as user input and check whether the character is
lowercase (a-z)or uppercase(A-Z)
import java.util.*;
class CheckLowerUpper
 {
   public static void main(String[] args)
    {
      Scanner sc=new Scanner(System.in);
      System.out.print("Enter the a character: ");
      char c=sc.next().charAt(0);
          if(c>='a'&&c<='z')
          {
                  System.out.println(c+" is A Lowercase Alphabet");
          }
          else if(c>='A'&&c<='Z')
          {
                 System.out.println(c+" is An Uppercase Alphabet");
          }
          else
          {
                 System.out.println(c+" is not an Alphabet");
          }
        }
 }
```

```
//6.WAJP to check whether the number is divisible by 5 and 11 or not.
import java.util.*;
class CheckDivisibility511
 {
   public static void main(String[] args)
    {
      Scanner sc=new Scanner(System.in);
```

```
      System.out.print("Enter the number: ");
      int n=sc.nextInt();
      if(n%5==0&&n%11==0)
        {
            System.out.println(n+" is divisible by 5 and 11 both");
        }
      else
       {
        System.out.println(n+" is not divisible by 5 and 11 both");
       }
    }
 }



//7.WAJP to check whether it is vowel or consonant.
import java.util.Scanner;
class CheckVowel
{
  public static void main(String[] args)
   {
     Scanner sc=new Scanner(System.in);
         System.out.print("Enter the a character: ");
         char x=sc.next().charAt(0);

if(x=='a'||x=='e'||x=='i'||x=='o'||x=='u'||x=='A'||x=='E'||x=='I'||x=='O'||x=='U')
         {
         System.out.print(x+" is a vowel");
         }
         else if((x>='a'&&x<='z')||(x>='A'&&x<='Z'))
         {
                 System.out.print(x+" is a consonant");
         }
         else
         {
                System.out.print(x+" is not an alphabet");
         }
   }
}



//8.WAJP to check whether it is an alphabet,digit or special number.
import java.util.Scanner;
class CheckAlphabetDigit
{
  public static void main(String[] args)
   {
     Scanner sc=new Scanner(System.in);
```

```
        System.out.print("Enter a character: ");
        char x=sc.next().charAt(0);
        if((x>='a'&&x<='z')||(x>='A'&&x<='Z'))
        {
                System.out.print(x+" is an Alphabet");
        }
        else if(x>=48&&x<=57)
        {
               System.out.print(x+" is a digit");
        }
        else
        {
                System.out.println(x+" is a special character");
        }
   }
}
```

```
//9.WAJP that take a character as user input and check whether the character is
lowercase or uppercase alphabet.
import java.util.*;
class CheckLowerUpper
 {
   public static void main(String[] args)
    {
      Scanner sc=new Scanner(System.in);
      System.out.print("Enter the a character: ");
      char c=sc.next().charAt(0);
          if(c>='a'&&c<='z')
          {
                  System.out.println(c+" is A Lowercase Alphabet");
          }
          else if(c>='A'&&c<='Z')
          {
                 System.out.println(c+" is An Uppercase Alphabet");
          }
          else
          {
                 System.out.println(c+" is not an Alphabet");
          }
        }
 }
```

```
//10.WAJP to input all sides of a triangle and check whether triangle is valid or
not.
import java.util.Scanner;
class CheckTriangle
{
  public static void main(String[] args)
   {
     Scanner sc=new Scanner(System.in);
         System.out.print("Enter the 1st side: ");
         int x=sc.nextInt();
         System.out.print("Enter the 2nd side: ");
         int y=sc.nextInt();
         System.out.print("Enter the 3rd side: ");
         int z=sc.nextInt();
         if((x+y)>z&&(y+z)>x&&(x+z)>y)
         {
                 System.out.println(x+","+y+","+z+" Are the valid side of the
tringle");
         }
         else
         {
                 System.out.println(x+","+y+","+z+" Are not valid side of the
tringle");
         }
   }
}
```

```
//11.WAJP to input all angle of a triangle and check whether triangle is valid or
not.
import java.util.Scanner;
class CheckTriangle
{
  public static void main(String[] args)
   {
     Scanner sc=new Scanner(System.in);
         System.out.print("Enter the 1st angle: ");
         int x=sc.nextInt();
         System.out.print("Enter the 2nd angle: ");
         int y=sc.nextInt();
         System.out.print("Enter the 3rd angle: ");
         int z=sc.nextInt();
         if(x+y+z==180)
         {
                 System.out.println(x+","+y+","+z+" formed a valid triagle");
         }
         else
```

```
        {
                System.out.println(x+","+y+","+z+" not formed a valid triagle");
        }
   }
}
```

```
//12.WAJP to input all angle of a triangle and check whether triangle is
Equilateral,Isosceles or Scalene.
import java.util.Scanner;
class CheckEquilateral
{
  public static void main(String[] args)
   {
     Scanner sc=new Scanner(System.in);
         System.out.print("Enter the 1st angle: ");
         int x=sc.nextInt();
         System.out.print("Enter the 2nd angle: ");
         int y=sc.nextInt();
         System.out.print("Enter the 3rd angle: ");
         int z=sc.nextInt();
         if((x==y&&y==z)&&(x+y+z==180))
         {
                 System.out.println(x+","+y+","+z+" formed an Equilateral
triagle");
         }
   else if((x==y||y==z||z==x)&&(x+y+z==180))
         {
                 System.out.println(x+","+y+","+z+" formed an Isosceles triagle");
         }
         else if(x+y+z==180)
         {
                System.out.println(x+","+y+","+z+" formed an Scalene triagle");
         }
     else
         {
      System.out.println(x+","+y+","+z+" not formed a triagle");
         }
   }
}
```

```
//13.WAJP to find the real root of a quadratic equation.
import java.util.Scanner;
class QuadraticRoot
```

```
{
  public static void main(String[] args)
   {
     Scanner sc=new Scanner(System.in);
         System.out.print("Enter the value of a: ");
         double a=sc.nextDouble();
         System.out.print("Enter the value of b: ");
         double b=sc.nextDouble();
         System.out.print("Enter the value of c: ");
         double c=sc.nextDouble();
         double p=(b*b-(4*a*c));
         if(p>=0)
         {
                 System.out.println("the root will be
"+(((-b)+Math.sqrt(p))/(2*a))+" and "+(((-b)-Math.sqrt(p))/(2*a)));
         }
         else
         {
                 System.out.println("Roots are not real");
         }
   }
}
```

```
//WAJP to calculate % profit and % loss after taking cost price and selling price
as user input.
import java.util.Scanner;
class ProfitLoss
{
  public static void main(String[] args)
   {
     Scanner sc=new Scanner(System.in);
         System.out.print("Enter the cost price: ");
         double cp=sc.nextDouble();
         System.out.print("Enter the selling price: ");
         double sp=sc.nextDouble();
         if(cp>sp)
         {
                 System.out.println("You have loss of:"+(cp-sp));
                 double l=(cp-sp)*100/cp;
                 System.out.println("You  have %loss of:"+l+"%");
         }
         else
         {
                System.out.println("You have profit of:"+(sp-cp));
                 double l=(sp-cp)*100/cp;
                 System.out.println("You  have %profit of:"+l+"%");
```

```
            }
        }
    }
```