Qno1

```
import java.util.Scanner;
public class q1
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      int i,e,p=0,n=0;
      System.out.println("Enter the the value of no. element in  the list of numbers");
      e=sc.nextInt();
      System.out.println("Enter all the numbers of the list");
      for(i=1;i<=e;i++)
      {
         double m=sc.nextDouble();
         if(m<0)
         n=n+1;
         else
         p=p+1;
      }
      System.out.println("No. of negative elements="+n);
      System.out.println("No. of non-negative elements="+p);
   }
}
```

Qno2

```
import java.util.Scanner;
public class q2
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the value of n");
      int n=sc.nextInt();int i;double s=0.0;
      System.out.println("Enter the value of "+n+" numbers");
      for(i=1;i<=n;i++)
      {
         double a=sc.nextDouble();
         s=s+(a*a);
      }
      System.out.println("Sum of square of no.="+s);
   }
}
```

Qno3

```
import java.util.Scanner;
public class q3
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the value of n");
      int n=sc.nextInt();
      int term=0,i;
```

```
        for(i=0;i<n;i++)
        {
           term=(int)Math.pow(2,i);
           System.out.print(+term+" ");
        }
    }
}
```

Qno4

```
import java.util.Scanner;
public class q4
{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the value for n");
        int n=sc.nextInt();int i;
        System.out.println("Series is:-");
        for(i=1;i<=n;i++)
        {
           if(i%2!=0)
           {
              System.out.print("1"+"  ");
           }
           else if(i%2==0)
           {
              System.out.print("-1"+"  ");
           }
        }
    }
}
```

Qno5

```
import java.util.Scanner;
public class q5
{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        int i;double term=1;
        System.out.println("Enter the value for n");
        int n=sc.nextInt();
        if(n==1)
        {
           System.out.println(+term);
        }
        else if(n>1)
        {
        for(i=2;i<=n;i++)
        {
           term=term*(1.0/i);
        }
```

```
        System.out.println(+term);
        }
    }
}
```

Qno6

```
import java.util.Scanner;
public class q6
{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        int i;
        int n;
        System.out.println("Enter the number ");
        n=sc.nextInt();
        if(n<=0)
        {
            System.out.println("Not a factorial number");
        }
        else
        {
            for(i=1;i>=1;i++)
            {
                if(n%i==0)
                {
                    if(n==1)
                    {
                    System.out.println("Factorial number");
                    break;
                    }
                    else
                    n=n/i;
                }
                else
                {
                    if(n==1)
                    {
                        System.out.println("Factorial number");
                        break;
                    }
                    else
                    {
                        System.out.println("Not a factorial number");
                        break;
                    }
                }
            }
        }
    }
}
```

Qno7

```
import java.util.Scanner;
public class q7
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the number ");
      int n=sc.nextInt();int i,j,t=0,k=0;
      for(i=n;i>=1;i--)
      {
         if(k!=1)
         {
         if(n%i==0)
         {
            t=i;

            for(j=2;j>=1;j++)
            {
               if(t%j==0)
               {
                  t=t/j;
               }
               else
               {
                  if(t==1)
                  {
                     System.out.println("Factorial no.="+i);
                     k=1;
                     break;
                  }
                  else
                  {
                     break;
                  }
               }
            }
         }
         }
         }

      }
}
```

Qno8

```
import java.util.Scanner;
public class q8
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the valus of two number ");
      int a=sc.nextInt();
      int b=sc.nextInt();
```

```
        int s=0,k=0;
        while((b!=0)&&(a!=0))
        {
           if((a>0)&&(b>0))
           {
           s=s+a;
           b--;
           }
           else if((a>0)&&(b<0))
           {
              s=s-a;
              b=b+1;
           }
           else if((a<0)&&(b<0))
           {
           s=s-a;
           b=b+1;
           }
          else if((a<0)&&(b>0))
           {
              s=s+a;
              b--;
           }
        }
        System.out.println("product="+s);
    }
}
```

Qno9

```
import java.util.Scanner;
public class q9
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the number ");
      int n=sc.nextInt();int i,j,f=1,s=0;
      for(i=0;i<=n;i++)
      {
         for(j=1;j<=i;j++)
         {
            f=f*j;
         }
         s=s+f;
         f=1;
      }
      System.out.println("Sum of the series="+s);
   }
}
```

Qno10

```
import java.util.Scanner;
public class q10
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the number of terms in series ");
      int n=sc.nextInt();int i,a=1,b=3,s=0;
      for(i=1;i<=n;i++)
      {
      if(i==1)
      {
         System.out.print(+a+" ");
      }
      else if(i==2)
      {
         System.out.print(+b+" ");
      }
      else
      {
      s=a+b;
      System.out.print(+s+" ");
      a=b;
      b=s;
      }
      }
   }
}
```

Qno11

```
import java.util.Scanner;
public class q11
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the number of terms in series ");
      int n=sc.nextInt();
      int a=0,b=1,c=1,s=0,i,j;
      for(i=1;i<=n;i++)
      {
         if(i==1)
         System.out.print(+a+" ");
         else if(i==2)
         System.out.print(+b+" ");
         else if(i==3)
         System.out.print(+c+" ");
         else
         {
            s=a+b+c;
            System.out.print(+s+" ");
            a=b;
```

```
            b=c;
            c=s;
         }
      }
   }
}
```

Qno12

```
import java.util.Scanner;
public class q12
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the valus of two number ");
      int d=sc.nextInt();
      int e=sc.nextInt();
      int i,b=1,a=0,s=0,k=0;
      int max=Math.max(d,e);
      for(i=0;b<=max;i++)
      {
         if(((d==0)&&(e==1))||(((d==1)&&(e==0))))
         {
            k=1;
            System.out.println("True");
            break;
         }
         else
         {
             if(((d==a)&&(e==b))||((d==b)&&(e==a)))
            {
               k=1;
               System.out.println("True");
               break;
            }
            s=a+b;
            a=b;
            b=s;
         }
      }
      if(k==0)
      {
         System.out.println("False");
      }
  }
}
```

Qno13

```
import java.util.Scanner;
public class q13
{
   public static void main(String args[])
   {
```

```
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the number of terms in series ");
        int n=sc.nextInt();
        int i,j,t=0,s=0,f=1;
        if(n==1)
        System.out.print("1");
        if(n==2)
        System.out.print("1");
        if(n>2)
        {
           for(i=n-3;i<=n-2;i++)
           {
              t=i;
              for(j=1;j<=t;j++)
              {
                 f=f*j;
              }
              s=s+f;
              f=1;
           }
           System.out.println(+s);
        }
     }
}
```

Qno14

```
import java.util.Scanner;
public class q14
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the integer");
      int n=sc.nextInt();
      int r=0,c=0;
      while(n!=0)
      {
         r=n%10;
         c=c+1;
         n=n/10;
      }
      System.out.println("no. of digits="+c);
   }
}
```

Qno15

```
import java.util.Scanner;
public class q15
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the integer");
```

```
        int n=sc.nextInt();
        int r=0,s=0;
        while(n!=0)
        {
           r=n%10;
           s=s+r;
           n=n/10;
        }
        System.out.println("sum of digits="+s);
    }
}
```

Qno16

```
import java.util.Scanner;
public class q16
{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the set of number digits");
        int n=sc.nextInt();
        int m,s=0,i;
        System.out.println("Enter "+n+" number of single digits");
        for(i=1;i<=n;i++)
        {
           m=sc.nextInt();
           s=(s*10)+m;
        }
        System.out.println("Integer="+s);
    }
}
```

Qno17

```
import java.util.Scanner;
public class q17
{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the an integer");
        int n=sc.nextInt();int i,k=0;
        System.out.println("Other than 1");
        for(i=2;i<=n;i++)
        {
           if(n%i==0)
           {
              System.out.println(+i);
              k=1;
              break;
           }
        }
        if(k!=1)
        System.out.println("Not Found");
```

```
    }
}
```

Qno18

```
import java.util.Scanner;
public class q18
{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the an integer");
        int n=sc.nextInt();
        int i;
        System.out.print("All the divisor are=1 ");
        for(i=2;i<=n/2;i++)
        {
            if(n%i==0)
            System.out.print(+i+" ");
        }
        System.out.print(+n+" ");
    }
}
```

Qno19

```
public class q19a
{
    public static void main(String args[])
    {
        int i,j,f=0,max=0,t=0,ele=0;
        for(i=1;i<=100;i++)
        {
            t=i;
            for(j=1;j<=t;j++)
            {
                if(t%j==0)
                {
                    f=f+1;
                }
            }
            if(f>=max)
            {
                max=f;
                ele=i;
            }
            f=0;
        }
        System.out.println("Largest no. of divisor="+ele);
    }
}
```

Qno20

```
import java.util.Scanner;
public class q20
```

```
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the positive integers ");
      int n=sc.nextInt();
      int p=sc.nextInt();
      int min=Math.min(n,p);
      int i,k=0;
      for(i=2;i<=min;i++)
      {
         if((n%i==0)&&(p%i==0))
         {
            System.out.println("SCD="+i);
            k=1;
            break;
         }
      }
      if(k!=1)
      System.out.println("Not Found");
   }
}
```

Qno21

```
import java.util.Scanner;
public class q21
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the positive integers ");
      int n=sc.nextInt();
      int p=sc.nextInt();
      int min=Math.min(n,p);
      int max=Math.max(n,p);
      int i,j,k=0;
      for(i=1;i>=1;i++)
      {
         for(j=1;(min*j)<=(max*i);j++)
         {
            if((min*j)==(max*i))
            {
               System.out.println(+(min*j));
               k=1;
               break;
            }
         }
         if(k==1)
         {
            break;
         }
      }
   }
```

```
}
```
Qno22
```
import java.util.Scanner;
public class q22
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter the positive integers x and n respectively ");
      int x=sc.nextInt();
      int n=sc.nextInt();
      double res=Math.pow(x,n);
      System.out.println("Result="+res);
   }
}
```
Qno23
```
import java.util.Scanner;
public class q23

{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("enter the value of n and n>0");
      int n=sc.nextInt();
      int a=0,b=1,i,s=0;
      if(n==1)
      System.out.println(+a);
      else if(n==2)
      System.out.println(+b);
      else if(n>2)
      {
         for(i=3;i<=n;i++)
         {
            s=a+b;
            if(i==n)
            System.out.println(+s);
            a=b;
            b=s;
         }
      }
   }
}
```
Qno24
```
import java.util.Scanner;
public class q24

{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("enter the value of m and n");
```

```
        int n=sc.nextInt();
        int m=sc.nextInt();
        int min=Math.min(n,m);
        int i;
        for(i=1;i<=min;i++)
        {
           if((n%i==0)&&(m%i==0))
           {
              System.out.print(+i+" ");
           }
        }
    }
}
```

Qno25

```
import java.util.Scanner;
public class q25

{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("enter the value n and m");
        int n=sc.nextInt();
        int m=sc.nextInt();
        int t=0,i,s1=0,s2=0;
        t=n;
        for(i=1;i<t;i++)
        {
           if(t%i==0)
           {
             s1=s1+i;
           }
        }
        t=m;
        for(i=1;i<t;i++)
        {
           if(t%i==0)
           {
             s2=s2+i;
           }
        }
        if((s1==m)&&(s2==n))
        {
           System.out.println("Amicable no.");
        }
        else
        {
           System.out.println("Not Amicable no.");
        }
    }
}
```

Qno26

```
public class q26

{
   public static void main(String args[])
   {
      int i,j,t=0,s=0;
      System.out.println("perfect no.");
      for(i=1;i<=500;i++)
      {
         t=i;
         for(j=1;j<t;j++)
         {
            if(t%j==0)
            {
               s=s+j;
            }
         }
         if(s==i)
         {
            System.out.println(+s+" ");
         }
         s=0;
         t=0;
      }
   }
}
```