

```
1  import java.util.*;
2  public class OddNumbers
3  {
4      public static void main (String[] args)
5      {
6          System.out.println("Author :G.sai seshank");
7          System.out.println("SAP : 51834691");
8          int count=0;
9          int rem=0 ;
10         Scanner sc=new Scanner(System.in);
11         System.out.println("Enter a number: ");
12         int n= sc.nextInt();
13         while(n>0)
14         {
15             rem=n%10;
16             if(rem%2!=0)
17             {
18                 count++;
19             }
20             n=n/10;
21         }
22         System.out.println("odd Numbers: "+count);
23     }
24 }
25 }
```

× Terminal



```
Author :G.sai seshank
SAP : 51834691
Enter a number:
88
odd Numbers: 0
```

```
Process finished.
```



```

1  import java.util.Scanner;
2  class PalindromeCheck
3
4      public static boolean isPal(String s)
5      {
6          if(s.length() == 0 ||
7             s.length() == 1)
8              return true;
9          if(s.charAt(0) ==
10             s.charAt(s.length()-1))
11              return isPal(s.substring(1, s.length()-1));
12              return false;
13      }
14      public static void main(String[] args)
15      {
16
17          System.out.println("Author : G.saiseshank")
18          System.out.println("SAP : 51834691");
19          Scanner s = new Scanner(System.in);
20          System.out.println("Enter the String for check:");
21          String string = s.nextLine();
22          System.out.println("Output: ");
23          if(isPal(string))
24              System.out.println(string + " is a palindrome");
25          else
26              System.out.println(string + " is not a palindrome");
27      }
28

```

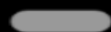
× Terminal



```

Author : G.saiseshank
SAP : 51834691
Enter the String for check:
samosa
Output:
samosa is not a palindrome

```



```

1  class BubbleSort
2  {
3      public static void main (String[] args)
4      {
5          System.out.println("Author : G.sai seshank");
6          System.out.println("SAP : 51834691");
7          int a[] = {95, 9, 18, 71, 22, 92};
8          for(int j = 0; j<a.length; j++)
9          {
10             boolean swapped = false;
11             int i = 0;
12             while(i<6-1)
13             {
14                 if (a[i] > a[i+1])
15                 {
16                     int temp = a[i];
17                     a[i] = a[i+1];
18                     a[i+1] = temp;
19                     swapped = true;
20                 }
21                 i++;
22             }
23             if (!swapped)
24                 break;
25         }
26         System.out.println("After Bubble Sorting");
27         for(int x : a)
28         {
29             System.out.print(x+" ");
30         }
31     }
32 }
33

```

× Terminal



```

Author : G.sai seshank
SAP : 51834691
After Bubble Sorting:
9 18 22 71 92 95
Process finished.

```



```

1  import java.util.Scanner;
2  import java.lang.Math;
3  import java.util.InputMismatchException;
4  class Calculator
5  {
6      int add(int no1,int no2)
7      {
8          return no1+no2;
9      }
10     double add(double no1,double no2)
11     {
12         return no1+no2;
13     }
14     float add(float no1,float no2)
15     {
16         return no1+no2;
17     }
18     int sub(int no1,int no2)
19     {
20         return no1-no2;
21     }
22     double sub(double no1,double no2)
23     {
24         return no1-no2;
25     }
26     float sub(float no1,float no2)
27     {
28         return no1-no2;
29     }
30     int mul(int no1,int no2)
31     {
32         return no1*no2;
33     }
34     double mul(double no1,double no2)
35     {
36         return no1*no2;
37     }
38     float mul(float no1,float no2)
39     {
40         return no1*no2;

```



Make public



```

    t no1,int no2)
    no1/no2:

```



```

40         return no1/no2;
41     }
42     int div(int no1,int no2)
43     {
44         return no1/no2;
45     }
46     double div(double no1,double no2)
47     {
48         return no1/no2;
49     }
50     float div(float no1,float no2)
51     {
52         return no1/no2;
53     }
54     long power(int no1,int no2) throws Exception
55     {
56         if(no1<0 || no2<0)
57         {
58             throw new Exception("no1 or no2 can't be negative");
59         }
60         if(no1==0 || no2==0)
61         {
62             throw new Exception("no1 or no2 can't be zero");
63         }
64         return (long)Math.pow(no1,no2);
65     }
66 }
67 class Solution
68 {
69     public static void main(String args[])
70     {
71         System.out.println("Author : G.sai seshank");
72         System.out.println("SAP : 51834691");
73
74         Scanner sc=new Scanner(System.in);
75         Calculator c=new Calculator();
76         try
77         {
78             while(true)
79             {
80                 System.out.println("Choose your operation:");
81                 int op=sc.nextInt();
82                 if(op==1)
83                 {
84                     System.out.println("Addition:");
85                     int no1=sc.nextInt();
86                     int no2=sc.nextInt();
87                     long sum=c.add(no1,no2);
88                     System.out.println("Sum: "+sum);
89                 }
90                 else if(op==2)
91                 {
92                     System.out.println("Subtraction:");
93                     int no1=sc.nextInt();
94                     int no2=sc.nextInt();
95                     long diff=c.sub(no1,no2);
96                     System.out.println("Difference: "+diff);
97                 }
98                 else if(op==3)
99                 {
100                     System.out.println("Multiplication:");
101                     int no1=sc.nextInt();
102                     int no2=sc.nextInt();
103                     long prod=c.mul(no1,no2);
104                     System.out.println("Product: "+prod);
105                 }
106                 else if(op==4)
107                 {
108                     System.out.println("Division:");
109                     int no1=sc.nextInt();
110                     int no2=sc.nextInt();
111                     long div=c.div(no1,no2);
112                     System.out.println("Division: "+div);
113                 }
114                 else if(op==5)
115                 {
116                     System.out.println("Power:");
117                     int no1=sc.nextInt();
118                     int no2=sc.nextInt();
119                     long pow=c.power(no1,no2);
120                     System.out.println("Power: "+pow);
121                 }
122                 else
123                 {
124                     System.out.println("Invalid operation");
125                 }
126             }
127         }
128         catch(Exception e)
129         {
130             System.out.println(e.getMessage());
131         }
132     }
133 }

```

⋮ Make public 🌐



⋮ Make public

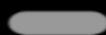


```

117     if(second==0)
118     {
119         throw new Exception("You cannot divide a num
120     }
121     System.out.println(first+"/"+second+"="+c.div(
122     break;
123     case 5 :
124         System.out.println("Enter the base number : ")
125         int base=sc.nextInt();
126         System.out.println("Enter the exponent : ");
127         int exp=sc.nextInt();
128         System.out.println(c.power(base,exp));
129         break;
130     case 6 :
131         System.exit(0);
132     default :
133         System.out.println("Invalid input");
134
135
136
137     h(InputMismatchException i)
138
139     System.out.println("Invalid input");
140
141     ch(ArithmeticException ae)
142
143     System.out.println(ae.getMessage());
144
145     ch(Exception e)
146
147     System.out.println(e.getMessage());
148
149
150

```

⋮ Make public 



Author : G.sai seshank

SAP : 51834691

Choose your option

1.add

2.subtract

3.multiply

4.Division

5.power

6.exit

4

Enter first number :

8

Enter second number :

2

$8.0/2.0=4.0$

Choose your option

1.add

2.subtract

3.multiply

4.Division

5.power

6.exit

1

Enter first number :

2


Enter second number :

8

$2.0+8.0=10.0$

Choose your option

1.add


```
× Terminal 
2.0+8.0=10.0
Choose your option
1.add
2.subtract
3.multiply
4.Division
5.power
6.exit
2
Enter first number :
8
Enter second number :
2
8.0-2.0=6.0
Choose your option
1.add
2.subtract
3.multiply
4.Division
5.power
6.exit
3
Enter first number :
8
Enter second number :
2
8.0*2.0=16.0
Choose your option
1.add
2.subtract
```

× Terminal



Enter first number :

8

Enter second number :

2

8.0*2.0=16.0

Choose your option

1.add

2.subtract

3.multiply

4.Division

5.power

6.exit

5

Enter the base number :

8

Enter the exponent :

2

64

Choose your option

1.add

2.subtract

3.multiply

4.Division

5.power

6.exit

6

Process finished.

```

class Pattern
{
    public static void main(String args[])
    {

        System.out.println("Author : G.sai seshank")
        System.out.println("SAP : 51834691");

        int k=1;
        for(int i=1;i<=5;i++)
        {
            for(int j=1;j<=i;j++)
            {
                if(j==1)
                {
                    k=j;
                }
                if(i!=4)
                {
                    if(i%2==0)
                    {
                        if(j%2!=0)
                        {
                            k=j+1;
                            System.out.print(k);
                            k=k-1;
                        }
                        else
                        {
                            System.out.print(k);
                        }
                    }
                    else
                    {
                        if(j%2==0)
                        {
                            k=j+1;
                            System.out.print(k);
                            k=k-1;

```



Make public



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```
23         if(j%2!=0)
24         {
25             k=j+1;
26             System.out.print(k);
27             k=k-1;
28         }
29         else
30         {
31             System.out.print(k);
32         }
33     }
34     else
35     {
36         if(j%2==0)
37         {
38             k=j+1;
39             System.out.print(k);
40             k=k-1;
41         }
42         else
43         {
44             System.out.print(k);
45         }
46     }
47 }
48 else
49 {
50     System.out.print(j);
51 }
52 }
53 System.out.println();
54 }
55 }
56 }
```

⋮ Make public 



```
1 class Pattern
2 {
3     public static void main(String args[])
4     {
5
6
7         System.out.println("Author : G.sai seshank")
8         System.out.println("SAP : 51834691");
9
10        int k=1;
11        for(int i=1;i<=5;i++)
12        {
13            for(int j=1;j<=i;j++)
14            {
15                if(j==1)
16                {
17                    k=j;
18                }
19                if(i!=4)
20                {
21                    if(i%2==0)
22                    {
23                        if(j%2!=0)
24                        {
```

× Terminal



```
Author : G.sai seshank
SAP : 51834691
```

```
1
21
132
1234
13254
```

```
Process finished.
```

