

```

1  import java.util.Scanner;
2  import java.util.InputMismatchException;
3  class Calculator
4  {
5
6      public void add(float a, float b, float c)
7      {
8          System.out.println(a+"+"+b+"+"+c+"="+(a+b+
9      }
10     public void add(float a, float b)
11     {
12         System.out.println(a+"+"+b+"="+(a+b));
13     }
14
15
16     public void subtract(float a, float b, float c)
17     {
18         System.out.println(a+"-"+b+"-"+c+"="+(a-b-
19     }
20     public void subtract(float a, float b)
21     {
22         System.out.println(a+"-"+b+"="+(a-b));
23     }
24
25
26     public void product(float a, float b)
27     {
28         System.out.println(a+"*"+b+"="+(a*b));
29     }
30
31
32     public void division(float a, float b)
33     {
34         System.out.println(a+"/"+b+"="+(a/b));
35     }
36 }
37 public class Main
38 {
39     public static void main (String[] args) {
40         Calculator cal=new Calculator();
41         Scanner sc=new Scanner(System.in);
42         System.out.println("Name:pavan kumar");
43         System.out.println ("sapid:51834695");
44         try
45         {
46             System.out.println("1. ADD\n2. SUBTRAC
47             int op=sc.nextInt();

```

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48         switch(op)
49         {
50             case 0:
51                 System.out.println("Exit...");
52                 System.exit(0);
53                 break;
54             case 1:
55                 System.out.print("Enter operand 1: ");
56                 float add1=sc.nextFloat();
57                 System.out.print("Enter operand 2: ");
58                 float add2=sc.nextFloat();
59                 System.out.print("Enter operand 3: ");
60                 float add3=sc.nextFloat();
61                 if(add3==0)
62                 {
63                     cal.add(add1, add2);
64                 }
65                 else
66                 {
67                     cal.add(add1, add2, add3);
68                 }
69                 break;
70             case 2:
71                 System.out.print("Enter operand 1: ");
72                 float sub1=sc.nextFloat();
73                 System.out.print("Enter operand 2: ");
74                 float sub2=sc.nextFloat();
75                 System.out.print("Enter operand 3: ");
76                 float sub3=sc.nextFloat();
77                 if(sub3==0)
78                 {
79                     cal.subtract(sub1, sub2);
80                 }
81                 else
82                 {
83                     cal.subtract(sub1, sub2, sub3);
84                 }
85                 break;
86             case 3:
87                 System.out.print("Enter operand 1: ");
88                 float mul1=sc.nextFloat();
89                 System.out.print("Enter operand 2: ");
90                 float mul2=sc.nextFloat();
91                 cal.product(mul1,mul2);
92                 break;
93             case 4:
94                 System.out.print("Enter operand 1: ");
95                 float div1=sc.nextFloat();

```

```

93         case 4:
94             System.out.print("Enter operar
95             float div1=sc.nextFloat();
96             System.out.print("Enter operar
97             float div2=sc.nextFloat();
98             if(div2==0)
99             {
100                 throw new ArithmeticExcept
101             }
102             cal.division(div1,div2);
103             break;
104         default:
105             System.out.println("Invalid ch
106     }
107 }
108 catch(InputMismatchException ime)
109 {
110     System.out.println("You have entered i
111 }
112 catch(ArithmeticException ae)
113 {
114     System.out.println(ae.getMessage());
115 }
116 }
117 }

```

Name:pavan kumar

sapid:51834695

1. ADD

2. SUBTRACT

3. MULTIPLICATION

4. DIVISION

5. EXIT

Enter your choice:

4

Enter operand 1: 10

Enter operand 2: 5

$10.0/5.0=2.0$

Process finished.

```

1 public class Main
2 {
3     public static boolean isPalindrome(String string,
4     {
5         if (low >= high) {
6             return true;
7         }
8
9         if (string.charAt(low) != string.charAt(high))
10             return false;
11     }
12
13     return isPalindrome(string, low + 1, high - 1);
14 }
15
16 public static void main(String[] args)
17 {
18     String string = "madam";
19
20     if (isPalindrome(string, 0, string.length() - 1)
21         System.out.println("Name:pavan kumar");
22         System.out.println ("Sap id:51834695");
23         System.out.print("given String is Palindrome")
24     } else {
25         System.out.print("given String is Not Palindr
26     }
27 }
28 }

```

```
Name:pavan kumar  
Sap id:51834695  
given String is Palindrome  
Process finished.
```

```
1 import java.util.*;
2 public class Main
3 {
4     public static void main (String[] args)
5     {
6         System.out.println("Name:pavan kumar");
7         System.out.println ("Sap id:51834695");
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        }
23        System.out.println("no of odd digits in number
24
25    }
26 }
```

Name:pavan kumar

Sap id:51834695

enter a number :

54

no of odd digits in number are ; 1

Process finished.


```
1  import java.util.Arrays;
2
3  class Main
4  {
5      public static void swap(int[] arr, int a, int b)
6      {
7          int temp = arr[a];
8          arr[a] = arr[b];
9          arr[b] = temp;
10     }
11
12     public static void bubbleSort(int[] arr, int m)
13     {
14         for (int a = 0; a < m - 1; a++) {
15             if (arr[a] > arr[a + 1]) {
16                 swap(arr, a, a + 1);
17             }
18         }
19         if (m - 1 > 1) {
20             bubbleSort(arr, m - 1);
21         }
22     }
23
24     public static void main(String[] args)
25     {
26         int[] arr = {10,3,9,50,4,25 };
27
28         bubbleSort(arr, arr.length);
29
30         System.out.println("Name:pavan kumar");
31         System.out.println ("Sap id:51834695");
32         System.out.println(Arrays.toString(arr));
33     }
34 }
```

```
Name:pavan kumar  
Sap id:51834695  
[3, 4, 9, 10, 25, 50]  
  
Process finished.
```