

```

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

```

```

42   r sc=new Scanner(System.in);
43   i.out.println("Author: Naveen \nSAP_ID:518345");
44
45
46   'stem.out.println("1. ADD\n2. SUBTRACT\n3. MULTIPLY\n4. DIVIDE\n5. EXIT");
47   int op=sc.nextInt();
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(if you want to add 3 numbers): ");
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(if you want to subtract 3 numbers): ");
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           }

```

```

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();
96         System.out.print("Enter operand 2:
97         float div2=sc.nextFloat();
98         if(div2==0)
99         {
100             throw new ArithmeticException(
101             }
102             cal.division(div1,div2);
103             break;
104     default:
105         System.out.println("Invalid choice
106     }
107 catch(InputMismatchException ime)
108
109     System.out.println("You have entered input
110
111 catch(ArithmeticException ae)
112
113     System.out.println(ae.getMessage());
114
115

```


Author: Naveen

SAP_ID:51834537

1. ADD
2. SUBTRACT
3. MULTIPLICATION
4. DIVISION
5. EXIT

Enter your choice:

3

Enter operand 1: 1

Enter operand 2: 3

$1.0 * 3.0 = 3.0$

Process finished.

```

1 public class Main
2 {
3     public static boolean isPalindrome(String st
4     {
5         if (low >= high) {
6             return true;
7         }
8
9         if (string.charAt(low) != string.charAt(hi
10            return false;
11        }
12
13        return isPalindrome(string, low + 1, high
14    }
15
16    public static void main(String[] args)
17    {
18        String string = "madam";
19
20        if (isPalindrome(string, 0, string.length(
21            System.out.println("Author:Naveen \nSAP_
22            System.out.print("given String is Palinc
23        } else {
24            System.out.print("given String is Not Pa
25        }
26    }
27 }

```

```
Author:Naveen  
SAP_ID:51834547  
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("Author :Naveen \n SAP_");
7         int count=0;
8         int rem=0 ;
9         Scanner sc=new Scanner(System.in);
10        System.out.println("enter a number :");
11        int n= sc.nextInt();
12        while(n>0)
13        {
14            rem=n%10;
15            if(rem%2!=0)
16            {
17                count++;
18            }
19            n=n/10;
20        }
21        System.out.println("no of odd digits in nu
22
23
24     }
25 }
```

Author :Naveen

SAP_ID:51834547

enter a number :

3

no of odd digits in number are ; 1

Process finished.

|