```java
import java.util.Scanner;
import java.util.InputMismatchException;
class Calculator
{

    public void add(float a,float b, float c)
    {
        System.out.println(a+"+"+b+"+"+c+"="+(a+b+
    }
    public void add(float a,float b)
    {
        System.out.println(a+"+"+b+"="+(a+b));
    }


    public void subtract(float a,float b, float c)
    {
        System.out.println(a+"-"+b+"-"+c+"="+(a-b-
    }
    public void subtract(float a,float b)
    {
        System.out.println(a+"-"+b+"="+(a-b));
    }


    public void product(float a,float b)
    {
        System.out.println(a+"*"+b+"="+(a*b));
    }


    public void division(float a,float b)
    {
        System.out.println(a+"/"+b+"="+(a/b));
    }
}
public class Main
{
    public static void main (String[] args) {
        Calculator cal=new Calculator();
        Scanner sc=new Scanner(System.in);
        System.out.println("Name:Vyshnavisrija");
        System.out.println ("sapid:51834503");
        try
        {
            System.out.println("1. ADD\n2. SUBTRAC
            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(
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:
```

```
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       }
108       catch(InputMismatchException ime)
109       {
110           System.out.println("You have entered input
111       }
112       catch(ArithmeticException ae)
113       {
114           System.out.println(ae.getMessage());
115       }
116   }
```

```
Name:Vyshnavisrija
sapid:51834503
1. ADD
2. SUBTRACt
3. MULTIPLICATION
4. DIVISION
5. EXIT
Enter your choice:
3
Enter operand 1: 12
Enter operand 2: 2
12.0*2.0=24.0

Process finished.
```

```java
public class Main
{
  public static boolean isPalindrome(String string,
  {
    if (low >= high) {
      return true;
    }

    if (string.charAt(low) != string.charAt(high))
      return false;
    }

    return isPalindrome(string, low + 1, high - 1);
  }

  public static void main(String[] args)
  {
    String string = "madam";

    if (isPalindrome(string, 0, string.length() - 1
      System.out.println("Name:Vyshnavisrija");
      System.out.println ("sap id:51834503");
      System.out.print("given String is Palindrome'
    } else {
      System.out.print("given String is Not Palindr
    }
  }
}
```

```
Name:Vyshnavisrija
sap id:51834503
given String is Palindrome
Process finished.
```

```java
import java.util.*;
public class Main
{
  public static void main (String[] args)
  {
    System.out.println("Name:Vyshnavisrija");
    System.out.println ("Sap id:51834503");
    int count=0;
    int rem=0 ;
    Scanner sc=new Scanner(System.in);
    System.out.println("enter a number :");
    int n= sc.nextInt();
    while(n>0)
    {
      rem=n%10;
      if(rem%2!=0)
      {
        count++;
      }
      n=n/10;

    }
    System.out.println("no of odd digits in number

  }
}
```

```
Name:Vyshnavisrija
Sap id:51834503
enter a number :
47
no of odd digits in number are ; 1

Process finished.
```

```java
import java.util.Arrays;

class Main
{
    public static void swap(int[] arr, int a, int b
    {
        int temp = arr[a];
        arr[a] = arr[b];
        arr[b] = temp;
    }

    public static void bubbleSort(int[] arr, int m)
    {
        for (int a = 0; a < m - 1; a++) {
            if (arr[a] > arr[a + 1]) {
                swap(arr, a, a + 1);
            }
        }
        if (m - 1 > 1) {
            bubbleSort(arr, m - 1);
        }
    }

    public static void main(String[] args)
    {
        int[] arr = {10,3,9,50,4,25 };

        bubbleSort(arr, arr.length);

        System.out.println("Name:Vyshnavisrija");
        System.out.println ("Sap id:51834503");
        System.out.println(Arrays.toString(arr));
    }
}
```

```
Name:Vyshnavisrija
Sap id:51834503
[3, 4, 9, 10, 25, 50]

Process finished.
```