

Date:05-04-2023

Assignment-01

Name: T.Sumanth

CSA0979-Programming in Java for AJAX applications

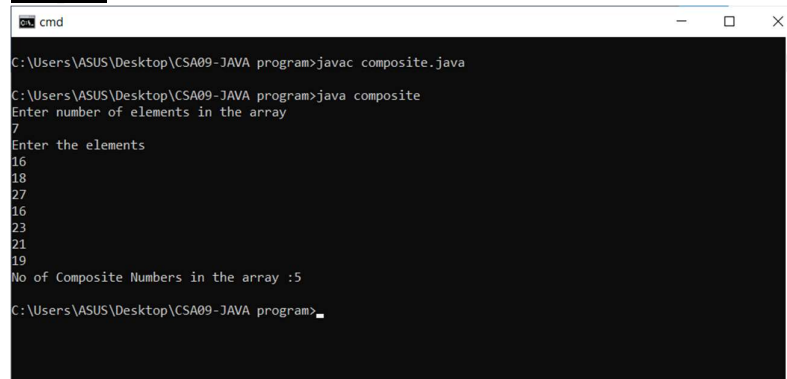
Reg.No:192011452

1. Write a program to print the number of Composite numbers in an array

Program:

```
import java.io.*;
import java.util.*;
import java.util.Scanner;
class composite
{
    public static void main(String arg[])
    {
        Scanner inp=new Scanner(System.in);
        System.out.println("Enter number of elements in the array");
        int s=inp.nextInt();
        int a[];
        a=new int[s];
        int i,j,c=0;
        System.out.println("Enter the elements");
        for(i=0;i<s;i++)
        {
            a[i]=inp.nextInt();
        }
        for(j=0;j<s;j++)
        {
            int count=0;
            for(int k=1;k<=a[j];k++)
            {
                if(a[j]%k==0)
                    count++;
            }
            if(count>2)
                c++;
        }
        System.out.println("No of Composite Numbers in the array :"+c);
    }
}
```

Output:



```
cmd
C:\Users\ASUS\Desktop\CSA09-JAVA program>javac composite.java
C:\Users\ASUS\Desktop\CSA09-JAVA program>java composite
Enter number of elements in the array
7
Enter the elements
16
18
27
16
23
21
19
No of Composite Numbers in the array :5
C:\Users\ASUS\Desktop\CSA09-JAVA program>
```

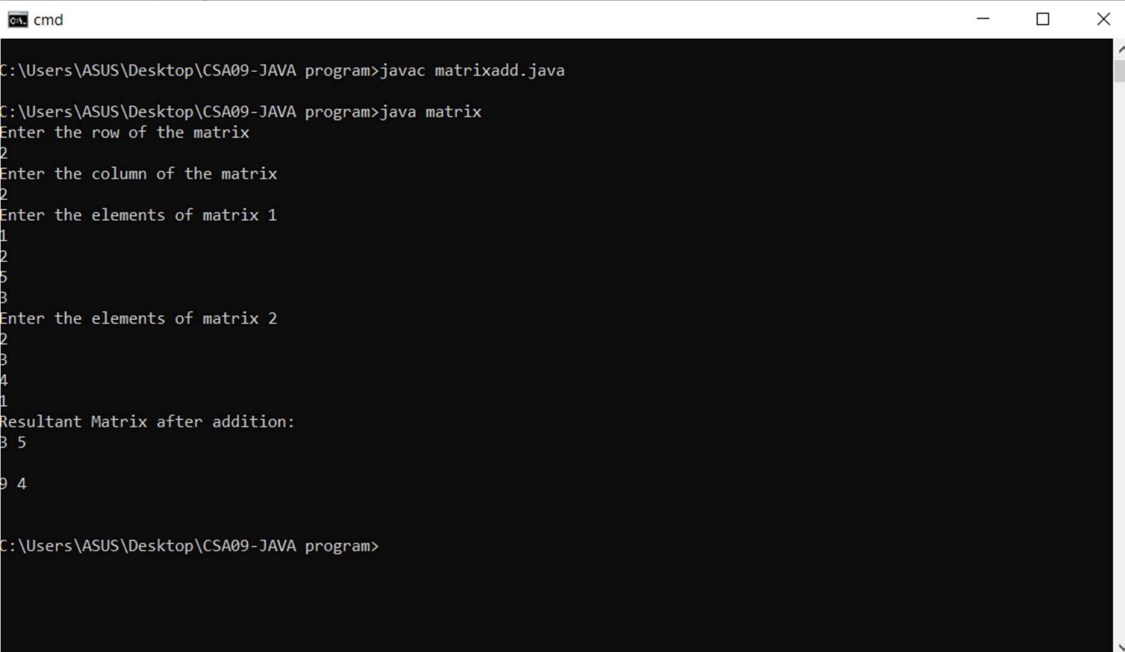
2. Write a program for matrix additon.

Program:

```
import java.io.*;
import java.util.*;
class matrix
{
    public static void main(String arg[])
    {
        Scanner m=new Scanner(System.in);
        System.out.println("Enter the row of the matrix");
        int r=m.nextInt();
        System.out.println("Enter the column of the matrix");
        int c=m.nextInt();
        int a[][]=new int[r][c];
        int b[][]=new int[r][c];
        int k[][]=new int[r][c];
        int i,j;
        System.out.println("Enter the elements of matrix 1");
        for(i=0;i<r;i++)
        {
            for(j=0;j<c;j++)
            {
                a[i][j]=m.nextInt();
            }
        }
        System.out.println("Enter the elements of matrix 2");
        for(i=0;i<r;i++)
        {
            for(j=0;j<c;j++)
            {
                b[i][j]=m.nextInt();
            }
        }
        for(i=0;i<r;i++)
        {
            for(j=0;j<c;j++)
            {
                k[i][j]=a[i][j]+b[i][j];
            }
        }
        System.out.println("Resultant Matrix after addition:");
        for(i=0;i<r;i++)
        {
            for(j=0;j<c;j++)
            {
                System.out.print(+k[i][j]+" ");
            }
            System.out.println("\n");
        }
    }
}
```

}

Output:



```
cmd
C:\Users\ASUS\Desktop\CSA09-JAVA program>javac matrixadd.java
C:\Users\ASUS\Desktop\CSA09-JAVA program>java matrix
Enter the row of the matrix
2
Enter the column of the matrix
2
Enter the elements of matrix 1
1
2
5
3
Enter the elements of matrix 2
2
3
4
1
Resultant Matrix after addition:
3 5
9 4
C:\Users\ASUS\Desktop\CSA09-JAVA program>
```

3. Write a program to return the square root to the rounded decimal

Program:

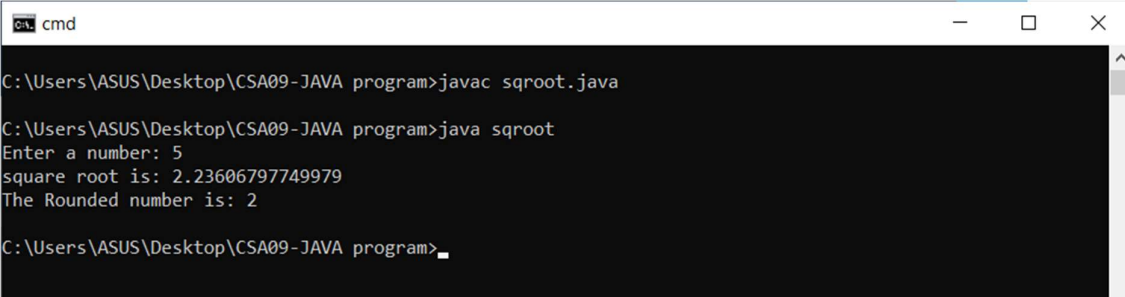
```
import java.util.Scanner;
class sqroot
{
    public static void main(String[] args)
    {
        System.out.print("Enter a number: ");
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        if(n<=0)
        {
            if(n==0)
            {
                System.out.println("Zero doesn't have any square root value");
            }
            else
            {
                System.out.println("Due to negative value ");
            }
        }
        else
        {
            double x = Math.sqrt(n);
            System.out.println("square root is: " +x);
        }
    }
}
```

```

        System.out.println("The Rounded number is: "+Math.round(x));
    }
}
}

```

Output:



```

cmd
C:\Users\ASUS\Desktop\CSA09-JAVA program>javac sqroot.java
C:\Users\ASUS\Desktop\CSA09-JAVA program>java sqroot
Enter a number: 5
square root is: 2.23606797749979
The Rounded number is: 2
C:\Users\ASUS\Desktop\CSA09-JAVA program>

```

4. Write a program to check whether the given number is Palindrome or Not

Program:

```

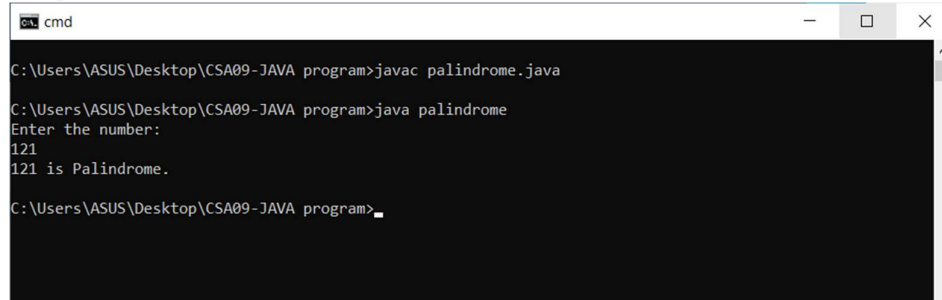
import java.io.*;
import java.util.*;
class palindrome {
    public static void main(String[] args)
    {
        Scanner sc=new Scanner(System.in);
        int num , reversedNum = 0, remainder;
        System.out.println("Enter the number:");
        num=sc.nextInt();
        int originalNum = num;

        while (num != 0) {
            remainder = num % 10;
            reversedNum = reversedNum * 10 + remainder;
            num /= 10;
        }

        if (originalNum == reversedNum) {
            System.out.println(originalNum + " is Palindrome.");
        }
        else {
            System.out.println(originalNum + " is not Palindrome.");
        }
    }
}

```

Output:



```

cmd
C:\Users\ASUS\Desktop\CSA09-JAVA program>javac palindrome.java
C:\Users\ASUS\Desktop\CSA09-JAVA program>java palindrome
Enter the number:
121
121 is Palindrome.
C:\Users\ASUS\Desktop\CSA09-JAVA program>

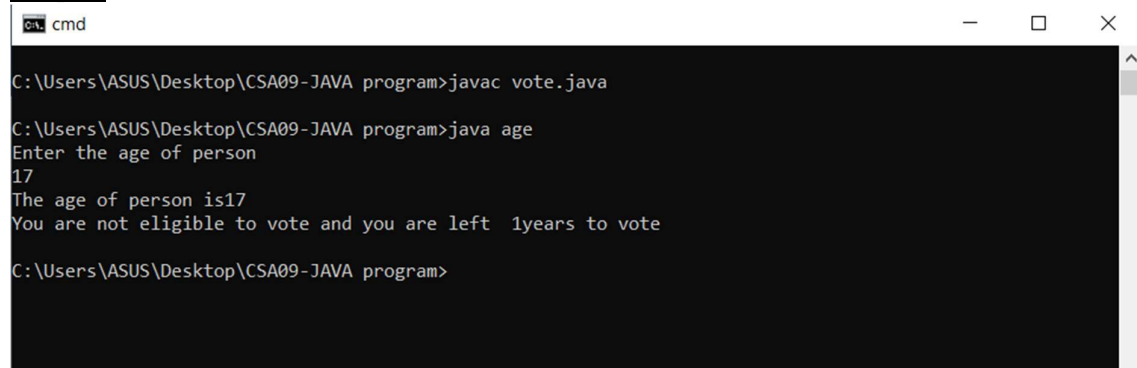
```

5. Find the error and Debug the code

Program:

```
import java.util.*;
class age
{
    public static void main(String args[]){
        Scanner scan=new Scanner (System.in);
        System.out.println("Enter the age of person");
        int user_age=scan.nextInt();
        System.out.println("The age of person is"+user_age);
        if(user_age>18)
        {
            System.out.println("You are eligible to Vote");
        }
        else
        {
            System.out.println("You are not eligible to vote and you are left  " + (18 - user_age) +
"years to vote ");
        }
    }
}
```

Output:



```
cmd
C:\Users\ASUS\Desktop\CSA09-JAVA program>javac vote.java
C:\Users\ASUS\Desktop\CSA09-JAVA program>java age
Enter the age of person
17
The age of person is17
You are not eligible to vote and you are left  1years to vote
C:\Users\ASUS\Desktop\CSA09-JAVA program>
```