

```
import java.util.Scanner;
public class Main
{
    // to check if string is palindrome using recursion
    public static boolean checkPalindrome(String str)
    {
        if(str.length() == 0 || str.length() == 1)
            return true;
        if(str.charAt(0) == str.charAt(str.length() - 1))
            return checkPalindrome(str.substring(1, str.length() - 1));
        return false;
    }
    public static void main(String[] args)
    {
        Scanner reader = new Scanner(System.in);
        System.out.println("Author: Ch.Tharun Raju.\nSAP ID: 51834549.");
        System.out.println("Please enter a string : ");
        String strInput = reader.nextLine();
        if(checkPalindrome(strInput))
        {
            System.out.println(strInput + " is palindrome");
        }
        else
        {
            System.out.println(strInput + " not a palindrome");
        }
        reader.close();
    }
}
```

Author: Ch.Tharun Raju.

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Please enter a string :

racecar

racecar is palindrome

...Program finished with exit code 0

Press ENTER to exit console.

```
import java.util.Scanner;
class Main{
    public static void main(String[] args){
        Scanner reader = new Scanner(System.in);
        System.out.println("Author: Ch.Tharun Raju\nSAP ID: 51834549.");
        System.out.println("Enter the number: ");
        int num = reader.nextInt();
        countOdd(num);
    }
    public static void countOdd(int n){
        int digit, c=0;
        int temp=n;
        while(n>0){
            digit=n%10;
            n = n/10;
            if(digit==0 || digit==1){
                continue;
            }
            if(digit%2!=0){
                c++;
            }
        }
        System.out.println("Count of odd numbers in given number: "+c);
    }
}
```

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Enter the number:

123456987

Count of odd numbers in given number: 4

mark

Program finished with exit code 0

ENTER to exit console.

```
public class Main{  
    public static void main(String[] args){  
        System.out.println("Author: Ch.Tharun Raju\nSAP ID: 51834549");  
        System.out.println("Enter the number of rows: ");  
        int rows = 5;  
        for (int i = 1; i <= rows; i++) { for (int j = i; j >= 1; j--){  
            System.out.print(j);  
        }  
        System.out.println();  
    }  
}
```

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Enter the number of rows:

1

21

321

4321

54321

...Program finished with exit code 0

Press ENTER to exit console.

```
public class Main {  
    public static void main(String []args) {  
        String str[] = { "Tharun", "Raj", "Likith", "Prabhakar", "Panther"};  
        String temp;  
        System.out.println("Author: Ch.Tharun Raju\nSAP ID: 51834549.");  
        System.out.println("Strings in sorted order:");  
        for (int j = 0; j < str.length; j++) {  
            for (int i = j + 1; i < str.length; i++) {  
                // comparing adjacent strings  
                if (str[i].compareTo(str[j]) < 0) {  
                    temp = str[j];  
                    str[j] = str[i];  
                    str[i] = temp;  
                }  
            }  
            System.out.println(str[j]);  
        }  
    }  
}
```

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Strings in sorted order:

Likith

Panther

Prabhakar

Raj

Tharun

...Program finished with exit code 0

Press ENTER to exit console.