31-07-2024 ASSIGNMENT-4 CSA-0993 JAVA PROGRAMMING

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31) FACTORIAL

```
import java.util.Scanner;
public class factorial {
    public static void main(String[] args){
        Scanner input = new Scanner(System.in);
        int n= input.nextInt();
        int fact=1;
        for(int i=1; i<=n; i++)
        {
            fact = fact*i;
        }
        System.out.print(n+" factorial = " + fact);
    }
}
```

32) PRINT THE PATTERN

```
import java.util.Scanner;
public class Pattern {
    public static void main(String[] args){
        Scanner input = new Scanner(System.in);
        int n=input.nextInt();
        int K=1;
        for(int i=1; i<=n; i++)
        {
            for(int j=1; j<=i; j++)
            {
                System.out.print(K*K+" ");
                K++;
            }
            System.out.println();
        }
    }
}
```

33) FIND THE NUMBER OF COMPOSITE NUMBER :-

```
import java.util.Scanner;
public class Composite {
    public static void main (String [] args) {
        Scanner input = new Scanner (System.in);
        int arr[] = {16, 18, 27, 16, 23, 21, 19 }
        int len = arr.length;
        int count = 0;
        for (int i=0; i<len; i++)
        {
            int c=0;
            for (int j=1; j<100; j++)
            {
                if (arr[i] % j == 0)
                {
                    c++;
                }
            }
            if (c >2)
                count ++;
        }
        System.out.println (count)
    }
}
```

34) n^{th} odd number

```
import java.util.Scanner;
public class nth odd {
    public static void main (String [] args) {
        Scanner input = new Scanner (System.in);
```

```
int n= input.nextInt();
int arr[]= new int [100];
int j=1;
for (int i=1; i<100; i++)
 {
    if (i%2==0)
     {
        arr[j] = i ;
        j++;
      }
  }
   System.out.print (arr[n*2]);
  }
}
```

35) STRING OR NOT

```
import java.util.Scanner;
public class String{
    public static void main (String[] args){
        Scanner input = new Scanner (System.in);
        String str = input.nextLine();
        char c = input.nextLine().charAt(0);
        char arr[] = new char [str.length()];
        int len = Str.length();
        int x=0;
        for (int i=0; i<len; i++)
        {
                arr[i] = str.charAt(i);
                if (arr[i]==c)
                {
                    System.out.println (c+"is found in string at
                                index: "+(i+1));
```

```
            x=1;
        }
    }
    if (x==0)
        System.out.print("character not found");
    }
}
```

36) RIGHT INVERTED PYRAMID

```
import java.util.Scanner;
public class Invert {
    public static void main (String[] args){
        Scanner input = new Scanner (System.in);
        int n= input.nextInt();
        for (int i=1; i<=n ; i++)
        {
            for(int j=1; j<=i; j++)
            {
                System.out.print(i);
            }
            System.out.println();
        }
        for(int i=n-1; i>=1; i--)
        {
            for (j=1; j<=i; j++)
            {
                System.out.print(i);
            }
            System.out.println();
        }
    }
}
```

37) ARMSTRONG NUMBER

```
import java.util.Scanner;
public class Armstrong {
    public static void main (String[] args){
        Scanner input = new Scanner (System.in);
        int n=input.nextInt();
        int num1=n;
        int arm = 0;
        while (num1!=0)
        {
            int rem = num1%10;
            arm = arm + (rem * rem * rem);
            num1 = num1 /10;

    }
     if (n== arm)
            System.out.print ("Armstrong number");

     else
            System.out.print ("Not an Armstrong number);

      }

}
```

38) REVERSE WORD :-

```
import java.util.Scanner;
import java.util.Arrays;
public class Reverse {
    public static void main (String[] args){

            Scanner input = new Scanner (System.in);
            String name = input.nextLine();
            int len = name.length();
```

```
char arr[] = new char [len];
String Alpha ;
for(int i=0; i<len; i++)
{
    arr[i] = name . charAt (i);
}
Arrays. sort (arr);
for (int i=len-1; i>=0; i--)
{
    System . out . print (arr [i] +" ");
}
}
}
```

39) REMOVE VOWELS:

```
import java. util. Scanner;
public class Vowels {
    public static void main (String[] args) {
        Scanner input = new Scanner (System. in);
        String name = input . nextLine ();
        String n1 = name . replaceAll ("[aeiouAEIOU]", "");
        System. out . println (n1);
    }
}
```

40) HOLLOW SQUARE DOLLAR PATTERN

```
import java.util.Scanner;
public class HollowSquare{
    public static void main (String[] args){
        Scanner input = new Scanner (System.in);
        int n = input.nextInt();
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                if (i==0 || j==0 || i==n || j==n-1)
                    System.out.print("$");
                else
                    System.out.print(" ");
            }
            System.out.println();
        }
    }
}
```