

31. write a program to print the given number is perfect number or not?

```
Scanner input = new Scanner(System.in);  
int n = input.nextInt();  
int factors = 0;  
for (int i = 1; i < n; i++)  
{  
    if (n % i == 0)  
        factors = factors + i;  
}  
if (n == factors)  
    System.out.print("It's a perfect number");
```

32. Find the factorial n?

```
Scanner input = new Scanner(System.in);  
int n = input.nextInt();  
int factor = 1;  
for (int i = 1; i <= n; i++)  
{  
    fact = fact * i;  
}  
System.out.print(n + " factorial = " + fact);
```

33. write a program to print the below pattern

```
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();  
}
```

34. write a program to find the sum of even numbers in an array of elements?

```
Scanner input = new Scanner(System.in);
```

```
int arr[] = {16, 18, 27, 10, 23, 21, 19};
```

```
int len = arr.length;
```

```
int count = 0;
```

```
for (int i = 0; i < len; i++)
```

```
{
```

```
    int c = 0;
```

```
    for (int j = 0; j < 100; j++)
```

```
    {
```

```
        if (arr[i] % j == 0)
```

```
        {
```

```
            c++;
```

```
        }
```

```
    } if (c > 2)
```

```
        count++;
```

```
System.out.println(count);
```

35. Find the nth odd number after n odd number

```
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.println(arr[n+2]);
```


86. Write a Program to find whether a character is present in a string or not?

```
Scanner input = new Scanner(System.in);  
String str = input.nextLine();  
char c = input.next().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("Character found at index: " + i);  
        x = 1;  
    }  
}  
if (x == 0)  
    System.out.println("Character not found");
```

87. Write a Program to Print the below pattern.

```
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 (int j = 1; j <= i; j++)  
        {  
            System.out.print(i);  
        }  
        System.out.println();  
    }  
}
```

28. write a program to find, whether the given number is Armstrong number or not.

```
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 Armstrong number");
```

39. write a program that accepts a string from user and displayed that same string after removing vowels from it.

```
Scanner input = new Scanner (System.in);  
String name = input.nextLine();  
String n1 = new String (name.replaceAll("[AEIOU]", ""));  
System.out.println (n1);
```

40. write a program to find the sum of digits of N digit number?

```
Scanner input = new Scanner (System.in);  
int n = input.nextInt();  
int sum = 0;  
while (n != 0)  
{  
    int rem = n % 10;  
    sum = sum + rem;  
    n = n / 10;  
}  
System.out.println (sum);
```