

1. Write a JAVA program to print all natural numbers from 1 to n. - using while loop
import java.util.Scanner;

```
public class Print_1_To_N_UsingWhile
{
    public static void main(String[] args)
    {
        int i =1;
        Scanner Sc = new Scanner(System.in);
        System.out.print("Enter the value n : ");
        int n = Sc.nextInt();
        System.out.println("Numbers are : ");
        while(i<=n)
        {
            System.out.println(i);
            i++;
        }
    }
}
```

2. Write a JAVA program to print all natural numbers in reverse (from n to 1). - using while loop
import java.util.Scanner;

```
public class ReverseNaturalNum1 {
    private static Scanner sc;
    public static void main(String[] args)
    {
        int number, i;
        sc = new Scanner(System.in);

        System.out.print(" Please Enter the Maximum integer Value : ");
        number = sc.nextInt();

        for(i = number; i >= 1; i--)
        {
            System.out.print(i +"\t");
        }
    }
}
```

3. Write a JAVA program to print all alphabets from a to z. - using while loop
public class PrintAlphabets {
import java.util.Scanner;

```
    public static void main(String[] args) {
        char alphabet = 'a';
```

```

        while (alphabet <= 'z') {
            System.out.print(alphabet + " ");
            alphabet++;
        }
    }
}

```

4. Write a JAVA program to print all even numbers between 1 to 100. - using while loop
import java.util.Scanner;

```

public class EvenNumbers {
    public static void main(String[] args) {
        int number = 2;

        while (number <= 100) {
            System.out.println(number);
            number += 2; /
        }
    }
}

```

5. Write a JAVA program to print all odd number between 1 to 100.

```

import java.util.Scanner;
public class OddNumbers
{
    public static void main(String args[])
    {
        int number=100;
        System.out.print("List of odd numbers from 1 to "+number+": ");
        for (int i=1; i<=number; i++)
        {

            if (i%2!=0)
            {
                System.out.print(i + " ");
            }
        }
    }
}

```

6. Write a JAVA program to find sum of all natural numbers between 1 to n.

```

import java.util.Scanner;
public class SumOfNaturalNumber1
{
    public static void main(String[] args)
    {
        int i, num = 10, sum = 0;

        for(i = 1; i <= num; ++i)
        {

```

```
sum = sum + i;
}
```

```
System.out.println("Sum of First 10 Natural Numbers is = " + sum);
}
}
```

7. Write a JAVA program to find sum of all even numbers between 1 to n.
import java.util.*;

```
public class EvenNumbers {

    public static void main(String[] args) {

        int n, sum = 0;

        System.out.println("Enter a number");

        Scanner in = new Scanner(System.in);
        n = in.nextInt();
        for(int i = 2; i <= n; i++) {

            if(i % 2 == 0) {
                sum = sum + i;
            }
        }

        System.out.println("The sum of all even numbers between 1
                           to " + n + " is " + sum);
    }
}
```

8. Write a JAVA program to find sum of all odd numbers between 1 to n.
import java.util.*;

```
public class OddNumberSum {
    public static void main(String args[]) {
        int N, i, sum = 0;

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter a number");
        N = sc.nextInt();

        for(i = 0; i <= N; i++){
            if((i%2) == 1){
                sum += i;
            }
        }
    }
}
```

```

    }

    System.out.print("Sum of all odd numbers
        between 0 to " + N + " = " + sum);
}
}

```

9. Write a JAVA program to print multiplication table of any number.

```

import java.util.Scanner;
public class Multiplication_Table
{
    public static void main(String[] args)
    {
        Scanner s = new Scanner(System.in);
        System.out.print("Enter number:");
        int n=s.nextInt();
        for(int i=1; i <= 10; i++)
        {
            System.out.println(n+" * "+i+" = "+n*i);
        }
    }
}

```

10. Write a JAVA program to count number of digits in a number.

```

import java.util.Scanner;
public class Digits {

    public static void main(String[] args) {

        int count = 0, num = 0003452;

        while (num != 0) {
            // num = num/10
            num /= 10;
            ++count;
        }

        System.out.println("Number of digits: " + count);
    }
}

```

11. Write a JAVA program to find sum of first and last digit of a number.

```

import java.util.Scanner;

public class SumDigits
{
    public static void main(String args[])
    {
        int n,fd,ld,sum;
        Scanner sc=new Scanner(System.in);
    }
}

```

```

        System.out.println("Enter a two digit number");
        n=sc.nextInt();
        fd=n/10;
        ld=n%10;
        sum=fd+ld;
        System.out.println("First digit=" + fd);
        System.out.println("Last digit=" + ld);
        System.out.println("Sum of first and last digit=" + sum);
    }
}

```

12. Write a JAVA program to check whether a number is palindrome or not.

```

import java.util.Scanner;
class PalindromeExample{
    public static void main(String args[]){
        int r,sum=0,temp;
        int n=454;
        temp=n;
        while(n>0){
            r=n%10;
            sum=(sum*10)+r;
            n=n/10;
        }
        if(temp==sum)
            System.out.println("palindrome number ");
        else
            System.out.println("not palindrome");
    }
}

```

13. Write a JAVA program to calculate sum of digits of a number.

```

import java.util.Scanner;
public class SumOfDigits
{
    public static void main(String arg[])
    {
        long number, sum;
        Scanner sc=new Scanner(System.in);
        System.out.print("Enter a number: ");

        number=sc.nextLong();

        for(sum=0; number!=0; number=number/10)
        {

            sum = sum + number % 10;
        }

        System.out.println("Sum of digits: "+sum);
    }
}

```

```
}
```

14. Write a JAVA program to enter a number and print its reverse.

```
import java.util.Scanner;
public class ReverseNumber
{
    public static void main(String[] args)
    {
        int number = 987654, reverse = 0;
        while(number != 0)
        {
            int remainder = number % 10;
            reverse = reverse * 10 + remainder;
            number = number/10;
        }
        System.out.println("The reverse of the given number is: " + reverse);
    }
}
```

15. Write a JAVA program to find frequency of each digit in a given integer.

```
import java.util.Scanner;
class Frequency
{
    public static void main(String arr[])
    {
        Scanner sc=new Scanner(System.in);
        int number,i,count,digit,temp;
        System.out.println("Enter any Number : ");
        number=sc.nextInt();
        System.out.println("Digit\tFrequency");
        for(i=0;i<=9;i++)
        {
            count=0;
            temp=number;
            while(temp>0)
            {
                digit=temp%10;
                if(digit==i)
                {
                    count++;
                }
                temp=temp/10;
            }
            if(count>0)
            {
                System.out.println(i+"\t"+count);
            }
        }
    }
}
```

16. Write a JAVA program to enter a number and print it in words.

```
import java.util.Scanner;

public class DigitToWord
{
    public static void main(String[] args)
    {
        int r, n, num;
        String digitWords = "";
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter number is");
        n = sc.nextInt();
        num = n;
        while (num > 0)
        {
            r = num % 10;
            switch (r)
            {
                case 0:
                    digitWords = "Zero " + digitWords;
                    break;
                case 1:
                    digitWords = "One " + digitWords;
                    break;
                case 2:
                    digitWords = "Two " + digitWords;
                    break;
                case 3:
                    digitWords = "Three " + digitWords;
                    break;
                case 4:
                    digitWords = "Four " + digitWords;
                    break;
                case 5:
                    digitWords = "Five " + digitWords;
                    break;
                case 6:
                    digitWords = "Six " + digitWords;
                    break;
                case 7:
                    digitWords = "Seven " + digitWords;
                    break;
                case 8:
                    digitWords = "Eight " + digitWords;
                    break;
                case 9:
                    digitWords = "Nine " + digitWords;
                    break;
            }
            num = num / 10;
        }
        System.out.println(digitWords);
    }
}
```

```

        }
        num = num / 10;
    }
    System.out.println("Digit=" + n);
    System.out.println("Words=" + digitWords);
}
}

```

17. Write a JAVA program to print all ASCII character with their values. public class PrintAsciiValueExample1
import java.util.Scanner;

```
public class ASCII
```

```
{
public static void main(String[] args)
{
```

```
char ch1 = 'a';
char ch2 = 'b';
```

```
int asciivalue1 = ch1;
int asciivalue2 = ch2;
System.out.println("The ASCII value of " + ch1 + " is: " + asciivalue1);
System.out.println("The ASCII value of " + ch2 + " is: " + asciivalue2);
}
}
```

18. Write a JAVA program to find power of a number using for loop.

```
import java.util.Scanner;
public class PowerOfNumber
{
    static int power(int base, int exponent)
    {
        int power = 1;
        for (int i = 1; i <= exponent; i++)

        power = power * base;

        return power;
    }
}
```

```
public static void main(String args[])
{
    int base, exponent;
    Scanner sc=new Scanner(System.in);
    System.out.print("Enter the base: ");
    base=sc.nextInt();
    System.out.print("Enter the exponent: ");
    exponent=sc.nextInt();
}
```



```

int pow=power(base, exponent);

System.out.println(base +" to the power " +exponent + " is: "+pow);
}
}

```

19. Write a JAVA program to find all factors of a number.

```

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

        int num = 10;

        System.out.println( "Factors of " + num + " are " );

        for(int i = 1; i <= num; i++)
        {
            if(num % i == 0)
                System.out.println(i + " ");
        }

    }
}

```

20. Write a JAVA program to calculate factorial of a number.

```

import java.util.Scanner;
class Factorial
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        int n=sc.nextInt();
        int FACT=1;
        while(n>=1)
        {
            FACT=FACT*n;
            n--;
        }
        System.out.println("FACTORIAL:" + FACT);
    }
}

```

21. Write a JAVA program to check whether a number is Prime number or not.

```

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

```

```

{
    Scanner sc=new Scanner(System.in);
    int n=sc.nextInt();
    for(int i=1;i<=n;i++)
    {
        int count=100;
        for(int j=1;j<=i;j++){
            if(j%i==0){
                count++;
            }
            if(count==2){
                System.out.println(i+" ");
            }
        }
    }
}

```

22. Write a JAVA program to check whether a number is Armstrong number or not.

```

import java.util.Scanner;
public class ArmStrong {

    public static void main(String[] args) {

        int num = 370, number, temp, total = 0;

        number = num;
        while (number != 0)
        {
            temp = number % 10;
            total = total + temp*temp*temp;
            number /= 10;
        }

        if(total == num)
            System.out.println(num + " is an Armstrong number");
        else
            System.out.println(num + " is not an Armstrong number");
    }
}

```

23. Write a JAVA program to check whether a number is Perfect number or not.

```

import java.util.Scanner;
public class PerfectNumber
{
    public static void main(String args[])
    {
        long n, sum=0;
        Scanner sc=new Scanner(System.in);
    }
}

```

```

System.out.print("Enter the number: ");
n=sc.nextLong();
int i=1;

while(i <= n/2)
{
    if(n % i == 0)
    {

        Sum = sum + i;
    }
    i++;
}
if(sum==n)
{

    System.out.println(n+" is a perfect number.");
}
else

    System.out.println(n+" is not a perfect number.");
}
}

```

24. Write a JAVA program to check whether a number is Strong number or not.

```

import java.util.*;
public class StrongNumber {

    public static void main(String[] args) {
        int inputNumber = 145;
        int i;
        int factorial, digit;
        int sum = 0;
        int temp = inputNumber;

        while(temp != 0) {
            i = 1;
            factorial = 1;

            digit = temp % 10;

            while(i <= digit) {
                factorial = factorial * i;
                i++;
            }

            sum = sum + factorial;

```

```

        temp = temp / 10;
    }

    if(sum == inputNumber)

        System.out.println(inputNumber + " is a strong number\n");
    else

        System.out.println(inputNumber + " is not a strong number\n");
    }
}

```

25. Write a JAVA program to print Fibonacci series up to n terms

```

import java.util.*;
public class Fibonacci
{
    public static void main(String[] args)
    {

        Scanner sc=new Scanner(System.in);
        int t1 = 0, t2 = 1;
        System.out.print("Enter the number of terms: ");
        int n=sc.nextInt();
        System.out.println("First " + n + " terms of fibonnaci series: ");

        for (int i = 1; i <= n; ++i)
        {
            System.out.print(t1 + " ");
            int sum = t1 + t2;
            t1 = t2;
            t2 = sum;
        }
    }
}

```