

(19)

```
import java.util.*;  
class sum {  
    public static void main (String args[]) {  
        Scanner sc = new Scanner (System.in);  
        int n = sc.nextInt();  
        int sum = 0;  
        for (int i=1; i<=n; i++) {  
            sum = sum+i;  
        }  
        System.out.println ("sum is : " + sum);  
    }  
}
```

Prime number:-

```
import java.util.*;  
class prime {  
    public static void main (String args[]) {  
        Scanner sc = new Scanner (System.in);  
        int n = sc.nextInt();  
        int count = 0;  
        for (int i=1; i<=n; i++) {  
            if (n%i == 0) {  
                count++;  
            }  
        }  
        if (count == 2) {  
            System.out.println ("prime");  
        }  
    }  
}
```

```

    } else
    {
        system.out.println ("composite");
    }
}
}
n=3, prime.

```

factorial of a number:

```

class factorial {
    public static void main (String args[]) {
        int n=6;
        int fact=1;
        for (int i=1; i<=n; i++) {
            fact=fact*i;
        }
        system.out.println (fact);
    }
}

```

$n=6 \rightarrow 720$

Reverse of a number:

```

class Reverse_of_number {
    public static void main (String args[]) {
        int n=341;
        int rev=0;
        while (n>0) {
            i = n%10;
            rev = rev*10+i;
            n = n/10;
        }
        system.out.println ("Reverse" + rev);
    }
}

```

Armstrong number:

```
class armstrong {
    public static void main (String args[]) {
        int n = 153;
        int temp = n;
        while (n > 0) {
            i = n % 10;
            sum += i * i * i;
            n = n / 10;
        }
        if (sum == temp) {
            System.out.println ("Not an armstrong");
        }
    }
}
```

6) Palindrome:-

```
class palindrome :
    public static void main (String args[]) {
        int n = 12321;
        int rev = 0;
        while (n > 0) {
            i = n % 10;
            rev = rev * 10 + i;
            n = n / 10;
        }
        if (rev == n) {
            System.out.println ("palindrome");
        }
        else {
            System.out.println ("Not");
        }
    }
}
```

sum of digits:-

```
class sum of digits {
```

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

```
int n = 123;
```

```
int sum = 0;
```

```
while (n > 0) {
```

```
    i = n % 10;
```

```
    sum += i;
```

```
    n = n / 10;
```

```
    }  
    System.out.println ("the sum is " + sum);
```

```
}
```

```
}
```

divisible by 5 and 7 up to n:-

```
class divisibility {
```

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

```
int n = 100;
```

```
for (int i = 1; i <= n; i++) {
```

```
    if (i % 5 == 0 & i % 7 == 0) {
```

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

```
    }
```

```
}
```

```
}
```

```
}
```

perfect number:-

```
class perfect {
```

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

```
int sum = 0;
```

```
int n = 28;
```

```
int i = 1;
```

```

for (i=1; i<n; i++) {
    if (n%i == 0) {
        sum = sum+i;
    }
}
if (sum == 0) {
    System.out.println ("perfect");
}
else {
    System.out.println ("not");
}
}
}

```

Sum of even and odd:-

```

class sum_of_even_odd {
    public static void main (String args[]) {
        int n=10, esum=0, osum=0;
        for (int i=1; i<n; i++) {
            if (i%2 == 0) {
                esum += i;
            }
            else {
                osum += i;
            }
        }
        System.out.println ("esum: " + esum);
        System.out.println ("osum: " + osum);
    }
}

```

Leap year:-

```
class LeapYear {  
    public static void main (String args[]) {  
        int year = 2024;  
        if (year % 4 == 0 || year % 400 == 0 && year % 100 != 0) {  
            System.out.println ("Leap");  
        }  
        else {  
            System.out.println ("Not");  
        }  
    }  
}
```

Even or odd:-

```
class EvenOdd {  
    public static void main (String args[]) {  
        int n = 400;  
        if (n % 2 == 0) {  
            System.out.println ("Even");  
        }  
        else {  
            System.out.println ("Odd");  
        }  
    }  
}
```

GCD and LCM

```
class GCD_LCM {  
    public static void main (String args[]) {  
        int a = 2;  
        int b = 4;  
        int temp;
```

```

while (n > 0) {
    temp = b;
    b = a + b;
    a = temp;
}
int gcd = a;
int lcm = (a * b) / gcd;
System.out.println ("gcd" + gcd);
System.out.println ("lcm" + lcm);
}
}

```

Strong number:-

```

class StrongNumber {
    public static void main (String args[]) {
        int n = 145;
        int sum = 0, rem, fact;
        int temp = n;
        while (n > 0) {
            rem = n % 10;
            fact = 1;
            for (i = 1; i <= rem; i++) {
                fact = fact * i;
            }
            sum = sum + fact;
            n = n / 10;
        }
        if (sum == temp) {
            System.out.println ("Strong");
        }
        else {
            System.out.println ("Not");
        }
    }
}

```


15)

celcius to farenheit:-

```

class Temperature {
    public static void main (String args[]) {
        double celsius = 39.0;
        double fahrenheit = (celsius * 9/5) + 32;
        System.out.println (fahrenheit)
    }
}

```

16)

farenheit to celcius:-

```

class Temperature {
    public static void main (String args[]) {
        double fahrenheit = 102.2;
        double celsius = (fahrenheit - 32) * 5/9;
        System.out.println (celsius);
    }
}

```

18)

Binary to decimal:-

```

class binary_decimal {
    public static void main (String args[]) {
        String binary string = "1010";
        int decimal = Integer.parseInt (binary string);
        System.out.println (decimal);
    }
}

```


sum of 2 num:-

1001 addition of 2 numbers

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

```
    int a=2;
```

```
    int b=2;
```

```
    int c=a+b;
```

```
    System.out.println ("sum is: "+ c);
```

```
}
```

```
}
```