1 Sum of natural num upto N.

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

Input: n=10   output = Sum = 55

2. prime number:

```java
import java.util.*;
class prime {
public static void main (string args[]) {
scanner sc = new scanner (system.in);
int n = sc.next int();
int count = 0;
for (int i=1; i<n; i++) {
    if (n% i== 0) {
        count++;
    }
```

```java
if (count ==2) {
system.out.print ("prime");}
else
{
system.out.prime ("composite");
}
Input: n=3          output: prime.
```

3. Factorial of number:

```java
class factorial {
public static void main (string args[]){
    int n=6;
    int fact =1;
for [ int   i=1 ; i<=n ;i++){
    fact = fact *i;
3
system.out.print (fact);
3
Output = 720.
```

4) Reverse of a Number:

```java
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 ("Rev num ": + rev);
}
```

Output = 143.

5 Armstrong number

```
class Armstrong {
public void static main (string args []) {
    int    n = 153
    int    temp = n;
    while (n > 0) {
        i = n % 10;
        sum = sum + i * i;
        n = n/10;
    }
    if (sum == temp) {
    system.out.print ("Armstrong");
    }
    else
    {
        system.out.point ("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;
   sum += i * i * i;
   n = n/10;
}
if (sum == temp){   if (rev == n){
system.out.print (      system.out.print ("palindrome,")
}
else {
system.out.println ("Nope")
}
output = palindrome.
```

7) 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 = sum + i;
   n = n/10;
   }
System.out.print (" The   sum is" + sum);
}
output = 6
```

Divisible by 5 and 7 :-

```
class divisibility {
public static void main (string args[]) {
int    n=100;
    for (int i=1 ; i<=n ; i++) {
        if ( i%5 ==0 & i%7 ===d {
        system.out.println (i);
3
3
3
```

output : 35, 70.

9) perfect number

```
class perfect {
public static void main (string args[]) {
    int    n=10; esum =0,   osum=0;

    int    sum = 0;
    int    n= 28;
    int    o=n;
    for (int    i=1; i<n ; i++) {
        if (n% i ==0) {
        sum = sum+i;
    }
    if (sum ==0) {
    system.out. print () { "perfect");
    }
    else
    system.out.println ("nope");
```

output :
perfect

10) Sum of even-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);

}
```

Output
= =

esum = 30

Osum = 25

11) Leap year:

```
class   leap year {
public static void main (string args[]){

int   year =2024;
if (year %4==0 || year %400==0 & year %100! ==0){
system.out.println ("Leap year");
}
else {
system.out.println (Not leap year");
}
Output = leap year.
```

Even_or_odds &

```
class    Even-odd {
public  static  void main (string argsr]){
    int    n=400;
    if (n% 2 ==0) {
    system.out.println ("Even");

    }
    else {
    system.out. println ("ODD");

    }
    Output = Even
```

13 GCD and LCM :-

```
class    GCD - LCM {
public  static  void main (string args []){

    int    a=2;
    int    b = 4;
    int    temp;
    while (b>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);

}
```

output :-

GCD : 2

Lcm : 4

14 strong number

```java
class strong number {
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<=n; i++){
    fact=fact *i;
}
sum = sum + fact;
   n=n/10;
if (sum==temp){
system-out.print("strong");}
else {
system-out.print("No") ;}}
```

Output: strong

15 Celcius to farienheat:-

```java
class    Temp {
public  static void main (string args[]){
double    celsius = 39.0;
double fahrenheit = (celsius * 9/5) + 32;
System.out.print (fohrenheit);}
```

Output = 102.2

farienheit to celcius:
```
class temp {
public static void main (string args []) {
double fahrenheit = 102.2;
double clecius = (fahreinheit -32) * 5/9;
system.out.print (celsius);

}
}
```
output = 39.0

18) Binary to Decimal:

```
class Binary -Decimal {
public static void main (string args[]) {
string binarystring = "1010";
int decimal = Int. parseint (binary string, 2);
system.out.print (decimal);
}
```
Output = 10

19) Decimal to Binary:

```
class Decimal - Binary {
public static void main (string args[]) {
int decimal = 10;
```

```
string binary = integer. to Binary string (decimal);
system. out. printn (binary);
}
}
Output :- 1010
```

20) Addition of 2 numbers :

```
class addition-of-2numbers {
public static void main (string args[ ]) {
    int   a=2;
    int   b=2;
    int   c=a+b;
system. out. printn ("sum is :"+ c);

}
}
```

Output :-   Sum is 5.