21) Print the Pattern :

```
import java.util.scanner;
public class pattern {
public static void main (string[] args) {
scanner input = new scanner (system.in);
char c = input.nextInt();
for (int i = 1; i <= n; i++)
for (int j = i; j <= i; j++)
{
system.out.point(c);
}
system.out.println();
}
}
```

22) Leap year or Not.

```
import java.util.scanner;
public class java {
public static void main (string[]args){
scanner input = new scanner (system.in)
system.out.print ("enter year")
string year = input.
string a[] = input.split("/");
string
```

```
string d=a[2];
int num = Integer.parseInt(d);
if (num % 4 == 0 && num % 100 != 0 || num % 400 == 0)
    System.out.println("It is a leap year");
else
    System.out.println("It is not a leap year");
```

23) Find the number of factors?

```
import java.util.Scanner;
public class java {
    public static void main(string []args){
        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;
        }
        System.out.print ("number of factors")
```

24) Perfect number or not :-

```
import java -util Scanner.
public class perfect {
    public static void main
    (string []args) {
```

```java
Scanner input stat void menu (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 is a perfect number");
    else
    system.out.print ("It is not a perfect number");
```

2r) Print The number of vowels.

```java
import java.util.Scanner;
public class vowels {
    public static void main (String [] args) {
    scanner input = new Scanner (system.in)
    string name = name length ();
    char a[] = new char (n);
    int vow = 0;
    for (int i = 0; i < a.i++)
    {
        a[i] = name charAt (i);
        if (a[i] == 'a' || a[i] == 'e' || a[i] == 'i' ||
            a[i] == 'o' || a[i] == 'u'
```

29. find square, cube of the given Decimal number.

```java
import java.util.scanner;
public class squarcube {
public static void main(string []args){
scanner input =new scanner (system.in);
float n=inputs ("square" + (n*n));
system.out print ("cube:" + (n*n*n))
}
}
```

30) find the frequency of each element in the array.

```java
import java.util.scanner;
import java.util.arrays;
public class ab {
public static void main(string[]args){
scanner input =new scanner (system.in);
int [a] =new int () {1.2,3,2,2,2,5,1};
int t[] = new int [a.length];
int visited = -1;
for (int i =0; i<a; length; i++)
{
```

27) Fibonacci series:

```java
import java.util.Scanner;
public class fibonacci {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int n = input.nextInt();
        int a1 = 0, a2 = 1;
        for(int i = 0; i < n; i++)
        {
            System.out.print(a1 + " ");
            a1 = a2;
            a2 = a3;
        }
    }
}
```

28) Print the pattern

```java
import java.util.Scanner;
public class num_pattern {
    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(n);
            }
        }
    }
}
```

```java
vow = vow + 1;
System.out.print(vow); 3
```

26) Print hollow square symbol pattern :

```java
import Jam.util. Manner;
public class square
    public static void main (String [] args){
        Manner input = new Manner (System.in);
        int n = 5;
        char c = input.next().charAt
        for (int i = 1; i <= n; i++)
        {
            for (int j = 1; j <= n; j++)
            {
                if (i == 1 || j == 1 || i == n || j == n)
                    System.out.print (c + " ");
                else
                    System.out.print (" ");
            }
            System.out.println();
        }
    }
}
```

```java
int count = 1;
for (int j = i+1; j < a.length; j++)
{
    if (a[i] == a[j])
    {
        count++;
        t[j] = visited;
    }
}

if (t[i] != visited;
    t[i] = count;

for (int i=0; i<a.length; i++)
{
    if (t[i] != visited)
    system.out.println(a[i] + "..." + t[i]);
}
```