Assignment-3

1. Print the Pattern

```
import java util scanner;
Public class Patten
    Public state void main (string sargs){
        scanner input -new scanner (System);
        char c=input.next Int ();
        for( inti=1; i<=n ; i++)
        {
        for (int j=J ;J<=n;j++)
        {
        system.out.print (c);
        }
        system .out. Print ( );
        }}
```

2. Leap year or not

```
import java util scanner;
Public static void main (string .);{
scanner input =new scanner ( system.in)
system . out. Print (Enter year' ));
String year = input nextl();
string a() = int split (%);
```

```
string d.a[e];
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 leap year");
```

③ 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)
       values = factors + 1; }
 System.out.print("number of factors)
```

(4) Perfect or not

```
import java.util.Scanner
Public class Perfect{
        Public static void main(String args){
Input static sum(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.println("It is a Perfect number");
else:
   System.out.println("It is not a perfect number");
```

5 Print the number of vowels

```
import java.util.Scanner;
    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(i=0; i<n; i++)

{

a[i] = new char(i);

if [a[i]] == 'a' || a[i] == 'e' ||a[i] == 'i'|| a[i] == 'o'||a[i] ||

    vow = val + 1;

}

System.out.println (vow) ;}

}
```

3) find square, cube of the given decimal number

```
import java.util.Scanner;
public class Squarecube {
  public static void main (String[] args) {
  Scanner input = new Scanner (System.in);
  float n = input (Item "+(n*n));
System.out.print ("Cube "+(n*n*n));

 }
}
```

2 Print the pattern

```
import java.util.Scanner;
public class numPattern;
    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 (j); }}
}
```

Fibonacci series

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