

Java Programme:

3. import java.util.Scanner;
class p3
{
public static void main(String args[])
{
Scanner sc=new Scanner(System.in);
int n,i,j,ctr=1;
System.out.println("Enter value for n");
n=sc.nextInt();
for (i=1; i<=n; i++)
{
for (j=1; j<=i; j++)
{
System.out.print(ctr+"\t");
ctr++;
}
System.out.println();
}
}
}

4. import java.util.Scanner;
class p4
{
public static void main(String args[])
{
Scanner sc=new Scanner(System.in);
int ue, see, total;
System.out.println("Enter UE marks out of 50
and SEE marks out of 100");
ue=sc.nextInt();
see=sc.nextInt();
total= ue+(see/2);
}

```

if (total >= 90)
    System.out.println("S Grade");
else if (total >= 80)
    System.out.println("A Grade");
else if (total >= 70)
    System.out.println("B Grade");
else if (total >= 60)
    System.out.println("C Grade");
else if (total >= 50)
    System.out.println("D Grade");
else if (total >= 40)
    System.out.println("E Grade");
else if (total < 40)
    System.out.println("F Grade");
}
}
}

```

5.

```

import java.util.Scanner;
class ps
{
    public static void main (String args[])
    {
        Scanner sc = new Scanner(System.in);
        int a, b, i, j, nof;
        System.out.println("Enter 2 integers (enter the first number first)");
        a = sc.nextInt();
        b = sc.nextInt();
        System.out.println("Prime numbers between the given numbers (inclusive):");
        for (i = a; i <= b; i++)
        {
            nof = 0;
            for (j = 1; j <= i; j++)
            {

```

if (i%j == 0)
 nof++;
 }
 if (nof == 2)
 System.out.print(i + "\t");
 }
 }

6. import java.util.Scanner;
 class p6
 {
 public static void main (String args[])
 {
 Scanner sc = new Scanner(System.in);
 int b, p = 1;
 double r, h, a, v;
 while (p == 1)
 {
 System.out.println("Enter the number");
 System.out.println("1 - Cylinder \n 2 - Cone \n 3 -
 Sphere \n 0 - Stop");
 b = sc.nextInt();
 if (b == 0)
 break;
 switch (b)
 {
 case 1:
 {
 System.out.println("Enter radius and height");
 r = sc.nextDouble();
 h = sc.nextDouble();
 a = (2 * 3.14 * r * h) + (2 * 3.14 * r * r);
 v = 3.14 * r * r * h;
 System.out.println("Area = " + a + ", Volume = " + v);
 }
 break;

Case 2:

```
{  
System.out.println("Enter radius and height");  
r = sc.nextDouble();  
h = sc.nextDouble();  
a = (3.14 * r) * (r + Math.sqrt((h * h) + (r * r)));  
v = (3.14 * r * r * h) / 3;  
System.out.println("Area = " + a + ", Volume = " + v);  
}
```

break;

Case 3:

```
{  
System.out.println("Enter radius");  
r = sc.nextDouble();  
a = 4 * 3.14 * r * r;  
v = (3.14 * 4 * r * r * r) / 3;  
System.out.println("Area = " + a + ", Volume = " + v);  
}
```

break;

default:

```
{
```

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

```
}
```

```
}
```

```
}
```

```
}
```