```
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 the 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();
}
}}
```

```
C:\Users\Adithi\Desktop\java_prgs>javac p3.java

C:\Users\Adithi\Desktop\java_prgs>java p3
Enter the value for n
5
1
2       3
4       5       6
7       8       9       10
11      12      13      14      15

C:\Users\Adithi\Desktop\java prgs>
```

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

```
C:\Users\Adithi\Desktop\java_prgs>javac p4.java

C:\Users\Adithi\Desktop\java_prgs>java p4
Enter CIE marks out of 50 and SEE marks out of 100
40
90
A grade

C:\Users\Adithi\Desktop\java_prgs>java p4
Enter CIE marks out of 50 and SEE marks out of 100
20
50
E grade
```

```
import java.util.Scanner;
class p5
{
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 least 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");
}
}}
```

```
C:\Users\Adithi\Desktop\java_prgs>javac p5.java

C:\Users\Adithi\Desktop\java_prgs>java p5
Enter 2 integers(enter the least number first)
3
17
Prime numbers between the given numbers(inclusive):
3       5       7       11      13      17
C:\Users\Adithi\Desktop\java_prgs>
```

```
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\n2-Cone\n3-Sphere\n0-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;
```

```
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");
}
}
}
}}
```

```
C:\Users\Adithi\Desktop\java_prgs>javac p6.java

C:\Users\Adithi\Desktop\java_prgs>java p6
Enter the number
1-Cylinder
2-Cone
3-Sphere
0-Stop
1
Enter radius and height
3.8
8.9
Area= 303.07280000000003,Volume= 403.54024000000004
Enter the number
1-Cylinder
2-Cone
3-Sphere
0-Stop
2
Enter radius and height
6
8.14
Area= 303.5566530195195,Volume= 306.7152
Enter the number
1-Cylinder
2-Cone
3-Sphere
0-Stop
3
Enter radius
6.859
Area= 590.89626536,Volume= 1350.9858280347469
Enter the number
1-Cylinder
2-Cone
3-Sphere
0-Stop
0

C:\Users\Adithi\Desktop\java_prgs>
```