

Java

3. `import java.util. Scanner;`

`Class Student {`

`public static void (String args []) {`
`Scanner sc = new Scanner(System.in);`
`System.out.println("Enter a number:");`
`int = sc.nextInt();`

`int num = 1;`

`for (int i=0; i<n; i++) {`
`for (int j=0; j<=i; j++) {`

`System.out.print (num + " ");`
`++ num;`

`}`
`System.out.println();`

`}`

`}`

`}`

4. import java.util. Scanner;
import java.lang. Math;

class Exam {

public static void main (String args[]) {

~~final~~ int

final int SUB = 6;

float [] cieMark = new float [SUB];

float [] seeMark = new float [SUB];

float [] totMark = new float [SUB];

float cie, see;

int i, j, k;

Scanner sc = new Scanner (System.in);

System.out.println ("Enter cie marks out of
50: ");

for (i = 0; i < SUB; i++) {

System.out.println ("Sub " + (i+1));

cie = sc.nextFloat();

if (cie > 50) {

System.out.println ("Enter marks
for 50-");

i = i + 1;

}

cieMark[i] = Math.round (cie);

}

```
System.out.println("Enter see marks out of  
100:");
```

```
for (i = 0; i < SUB; i++)
```

```
System.out.println("Sub" + (i + 1));
```

```
see = Sc.nextFloat();
```

```
if (see > 100)
```

```
System.out.print("Enter marks  
for 100:");
```

```
0 = 1;
```

```
}
```

```
else
```

```
seeMark[i] = Math.round(see/2);
```

```
}
```

```
for (k = 0; k < SUB; k++)
```

```
totMark[k] = cieMark[k] + seeMark[k];
```

```
System.out.println("for Subject" + (k + 1)  
+ " grade is:");
```

```
if (totMark[k] >= 90)
```

```
System.out.println("S");
```

```
}
```

```
elseif (totMark[k] >= 80) {
```

```
System.out.println("A");
```

```
}
```

```
else if (totMark[k] >= 70){  
    System.out.println("B");  
}  
else if (totMark[k] >= 60){  
    System.out.println("C");  
}  
else if (totMark[k] >= 50){  
    System.out.println("D");  
}  
else if (totMark[k] >= 40){  
    System.out.println("E");  
}  
else{  
    System.out.println("F");  
}  
}  
}  
}
```


5. Import java.util. Scanner;

P

```
public class Prime {  
    public static void main (String args[])
```

```
{
```

```
    int a, b, num 1, num 2, i, j;
```

```
    Scanner sc = new Scanner (System.in);
```

```
    System.out.println ("Enter two nos:");
```

```
    num 1 = sc.next Int();
```

```
    num 2 = sc.next Int();
```

```
    if (num 1 > num 2){
```

```
        a = num 2;
```

```
        b = num 1; }
```

```
    else {
```

```
        a = num 1;
```

```
        b = num 2;
```

```
    }
```

```
    if (b < 2){
```

```
        System.out.println ("There are no prime  
        nos in this range:");
```

```
        System.exit(0);
```

```
    }
```

```
    System.out.println ("prime no.s in the  
        range:");
```

```

for (i = a; i <= b; i++) {
    int flag = 0;
    for (j = 2; j <= i/2; j++) {
        if (i % j == 0) {
            flag = 1;
            break;
        }
    }
    if (flag == 0 && i != 1 && i != 0) {
        System.out.print(i);
        System.out.println();
    }
}
}
}

```

6. import java.util.Scanner;
import java.lang.Math;

Class Area {

```

public static void main (String args[]) {
    final double pi = 3.14;
    double r, h;
    int choice;

```

```

double area, volume;
System.out.println("Enter shape you want");
Scanner sc = new Scanner(System.in);
do
{
    System.out.println("\nMenu | 1: Cylinder | 2: Cone | 3: Sphere | 4: Exit |");
    choice = sc.nextInt();
    switch(choice)
    {
        case 1: System.out.println("Enter radius:");
                r = sc.nextDouble();
                System.out.println("Enter height:");
                h = sc.nextDouble();
                area = (2 * pi * r * h) + (2 * pi * Math.pow(r, 2));
                volume = pi * (Math.pow(r, 2)) * h;
                System.out.println("Area" + area + " volume" + volume);
                break;

        case 2: System.out.println("Enter radius:");
                r = sc.nextDouble();
                System.out.println("Enter height:");
                h = sc.nextDouble();
    }
}

```



```
area = pi * r * (r + Math.sqrt(Math.pow(h, 2)
    + Math.pow(r, 2))) ;
volume = pi * Math.pow(r, 2) * h / 3.0;
System.out.println("Area" + area + "Volume"
    + volume);
```

```
break;
```

```
Case 3: System.out.println("Enter radius:");
r = sc.nextDouble();
area = 4 * pi * Math.pow(r, 2);
volume = (4/3.0) * pi * (Math.pow(r, 3));
System.out.println("Area" + area + "Volume"
    + volume);
```

```
break;
```

```
Case 4: System.out.println("Exit:");
sc.close();
```

```
default: System.out.println("Enter a
    no. ranging from 1 to 4");
```

```
}
```

```
} while (choice == 4);
```

```
{
```

```
}
```