1. Write a program to print all the composite numbers between a and b?

Sample Input:

A = 12

B = 19

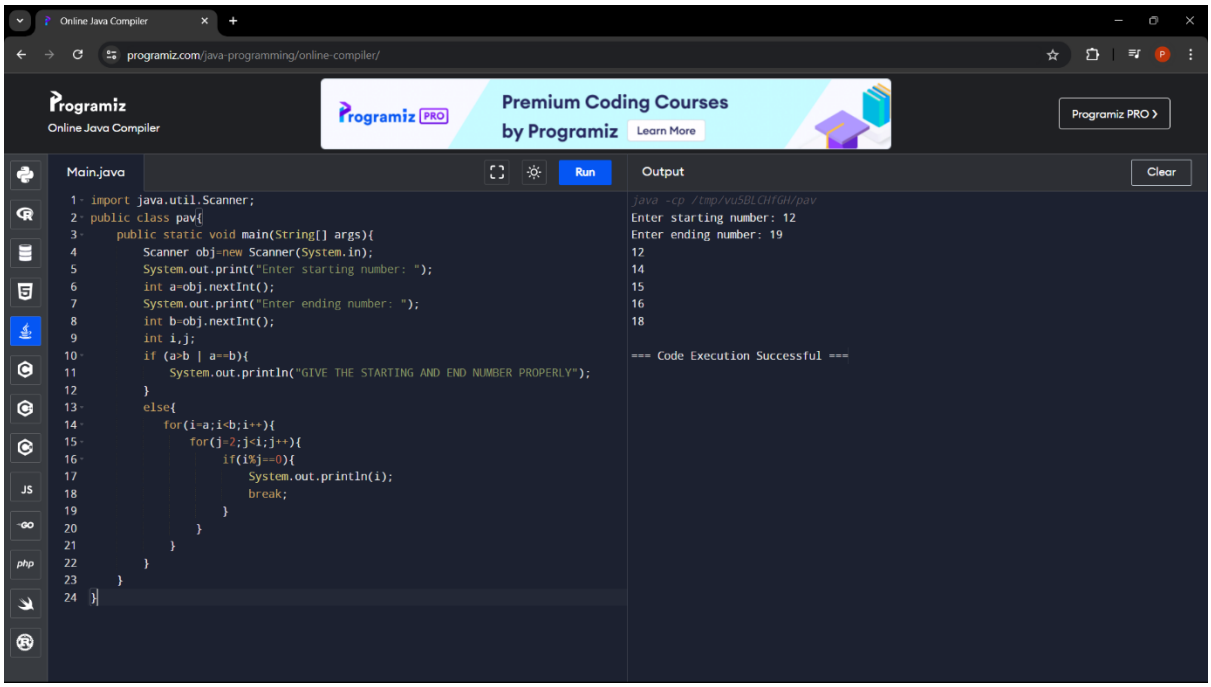
Sample Output

14, 15, 16, 18

PROGRAM CODE:

```
import java.util.Scanner;
public class pav{
   public static void main(String[] args){
      Scanner obj=new Scanner(System.in);
      System.out.print("Enter starting number: ");
      int a=obj.nextInt();
      System.out.print("Enter ending number: ");
      int b=obj.nextInt();
      int i,j;
      if (a>b | a==b){
         System.out.println("GIVE THE STARTING AND END NUMBER PROPERLY");
      }
      else{
        for(i=a;i<b;i++){
            for(j=2;j<i;j++){
                if(i%j==0){
                   System.out.println(i);
                   break;
                }
            }
        }
      }
   }
```

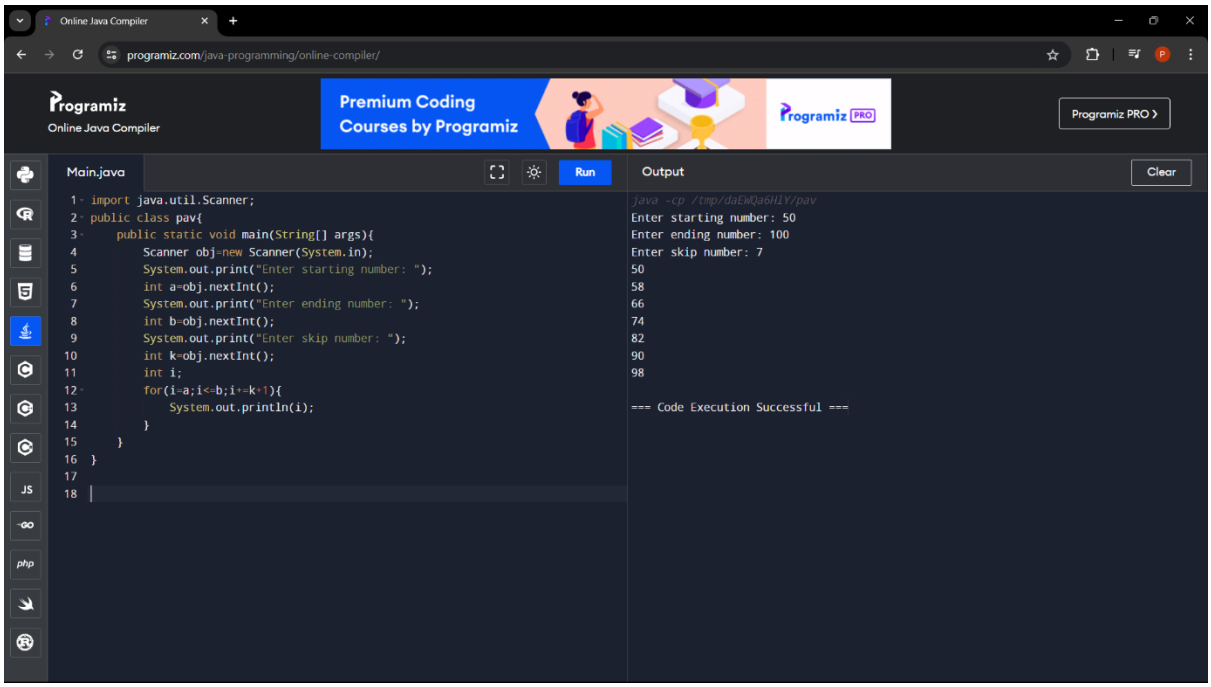
}


Online Java Compiler
programiz.com/java-programming/online-compiler/
Programiz
Online Java Compiler
Programiz PRO
Premium Coding Courses
by Programiz
Learn More
Programiz PRO
Main.java
Run
Output
Clear
import java.util.Scanner;
public class pav{
public static void main(String[] args){
Scanner obj=new Scanner(System.in);
System.out.print("Enter starting number: ");
int a=obj.nextInt();
System.out.print("Enter ending number: ");
int b=obj.nextInt();
int i,j;
if (a>b | a==b){
System.out.println("GIVE THE STARTING AND END NUMBER PROPERLY");
}
else{
for(i=a;i<b;i++){
for(j=2;j<i;j++){
if(i%j==0){
System.out.println(i);
break;
}
}
}
}
}
}
java -cp /tmp/vu5BLCHfGH/pav
Enter starting number: 12
Enter ending number: 19
12
14
15
16
18
=== Code Execution Successful ===

2. Write a program to print the numbers from M to N by skipping K numbers in between?

PROGRAM CODE:

```
import java.util.Scanner;
public class pav{
   public static void main(String[] args){
      Scanner obj=new Scanner(System.in);
      System.out.print("Enter starting number: ");
      int a=obj.nextInt();
      System.out.print("Enter ending number: ");
      int b=obj.nextInt();
      System.out.print("Enter skip number: ");
      int k=obj.nextInt();
      int i;
      for(i=a;i<=b;i+=k+1){
         System.out.println(i);
      }
   }
}
```

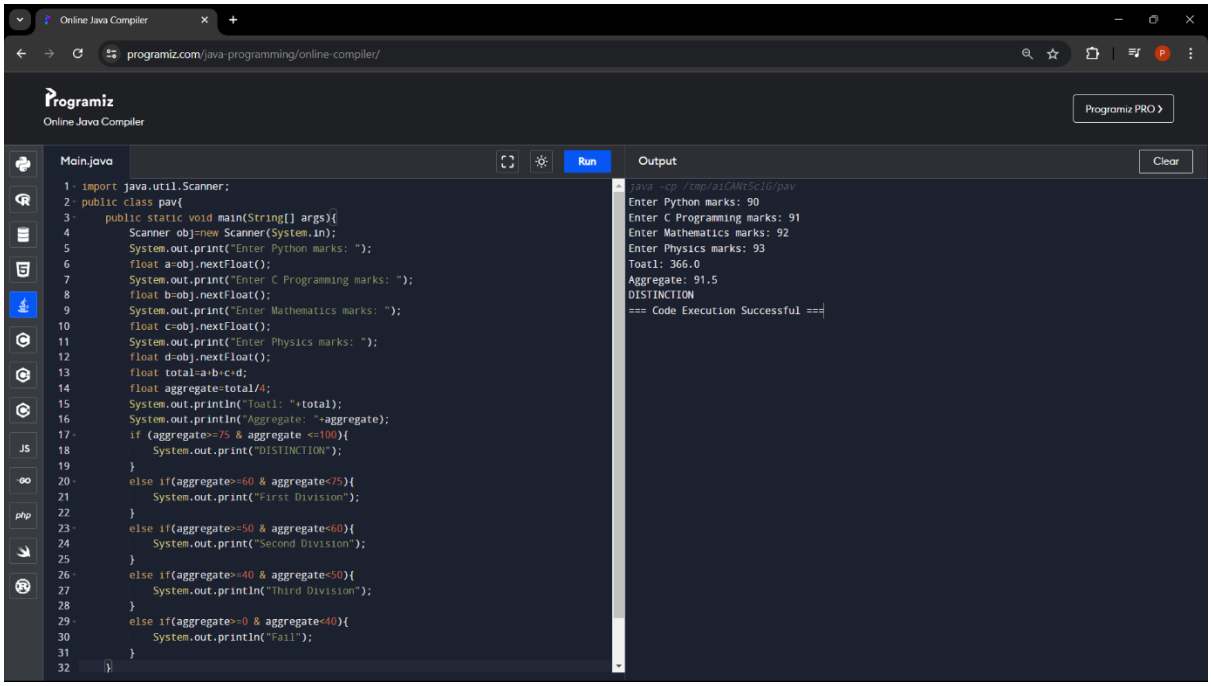


3. Write a program to enter the marks of a student in four subjects. Then calculate the total and aggregate, display the grade obtained by the student. If the student scores an aggregate greater than 75%, then the grade is Distinction. If aggregate is 60>= and <75, then the grade is First Division. If aggregate is 50 >= and <60, then the grade is Second Division. If aggregate is 40>= and <50, then the grade is Third Division. Else the grade is Fail.

PROGRAM CODE:

```
import java.util.Scanner;
public class pav{
   public static void main(String[] args){
      Scanner obj=new Scanner(System.in);
      System.out.print("Enter Python marks: ");
      float a=obj.nextFloat();
      System.out.print("Enter C Programming marks: ");
      float b=obj.nextFloat();
      System.out.print("Enter Mathematics marks: ");
      float c=obj.nextFloat();
      System.out.print("Enter Physics marks: ");
      float d=obj.nextFloat();
      float total=a+b+c+d;
      float aggregate=total/4;
      System.out.println("Toatl: "+total);
      System.out.println("Aggregate: "+aggregate);
      if (aggregate>=75 & aggregate <=100){
         System.out.print("DISTINCTION");
      }
      else if(aggregate>=60 & aggregate<75){
         System.out.print("First Division");
      }
      else if(aggregate>=50 & aggregate<60){
         System.out.print("Second Division");
      }
```

```
        else if(aggregate>=40 & aggregate<50){
            System.out.println("Third Division");
        }
        else if(aggregate>=0 & aggregate<40){
            System.out.println("Fail");
        }
    }
}
```



4. Write a program to calculate tax given the following conditions:

a. If income is less than or equal to 1,50,000 then no tax

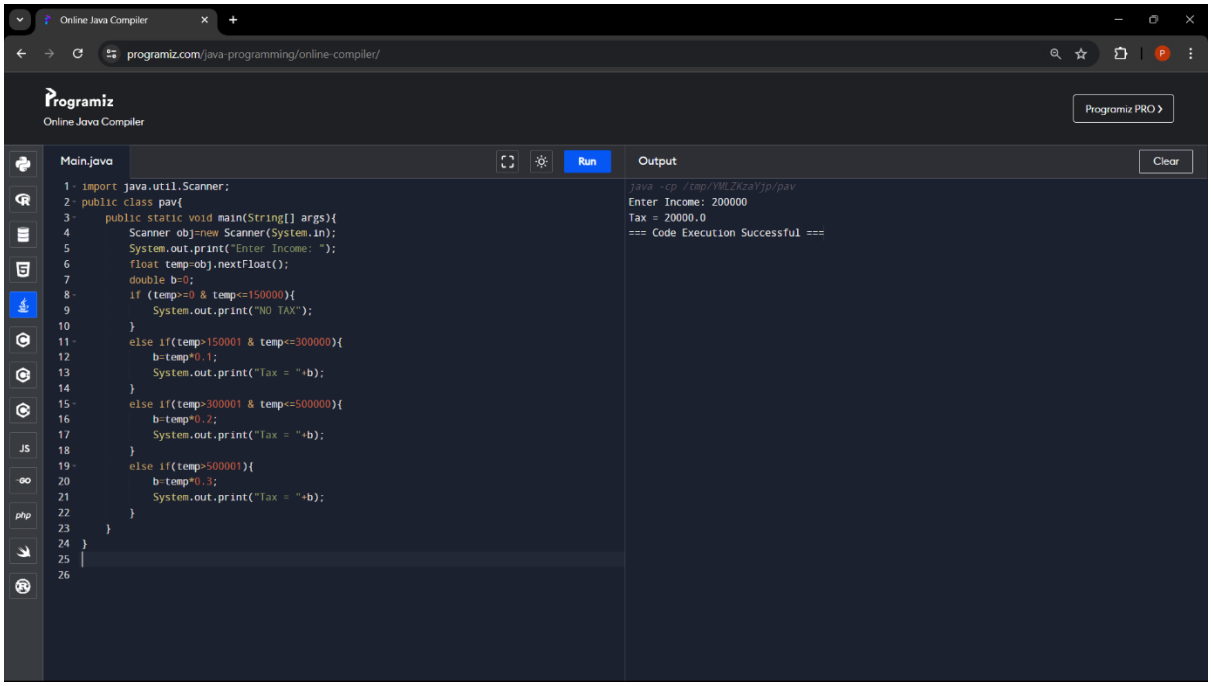
b. If taxable income is 1,50,001 – 3,00,000 the charge 10% tax

c. If taxable income is 3,00,001 – 5,00,000 the charge 20% tax

d. If taxable income is above 5,00,001 then charge 30% tax

PROGRAM CODE:

```
import java.util.Scanner;
public class pav{
   public static void main(String[] args){
      Scanner obj=new Scanner(System.in);
      System.out.print("Enter Income: ");
      float temp=obj.nextFloat();
      double b=0;
      if (temp>=0 & temp<=150000){
         System.out.print("NO TAX");
      }
      else if(temp>150001 & temp<=300000){
         b=temp*0.1;
         System.out.print("Tax = "+b);
      }
      else if(temp>300001 & temp<=500000){
         b=temp*0.2;
         System.out.print("Tax = "+b);
      }
      else if(temp>500001){
         b=temp*0.3;
         System.out.print("Tax = "+b);
      }
   }
}
```


Online Java Compiler
programiz.com/java-programming/online-compiler/
Programiz
Online Java Compiler
Programiz PRO
Main.java
Run
Output
Clear
1 import java.util.Scanner;
2 public class pav{
3 public static void main(String[] args){
4 Scanner obj=new Scanner(System.in);
5 System.out.print("Enter Income: ");
6 float temp=obj.nextFloat();
7 double b=0;
8 if (temp>=0 & temp<=150000){
9 System.out.print("NO TAX");
10 }
11 else if(temp>150001 & temp<=300000){
12 b=temp*0.1;
13 System.out.print("Tax = "+b);
14 }
15 else if(temp>300001 & temp<=500000){
16 b=temp*0.2;
17 System.out.print("Tax = "+b);
18 }
19 else if(temp>500001){
20 b=temp*0.3;
21 System.out.print("Tax = "+b);
22 }
23 }
24 }
25
26
java -cp /tmp/YWLZKzaYjp/pav
Enter Income: 200000
Tax = 20000.0
=== Code Execution Successful ===