THIRUPUGAZH S.R

ASSIGNMENT 1

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

Sample Input:

A **= 12**

B **= 19**

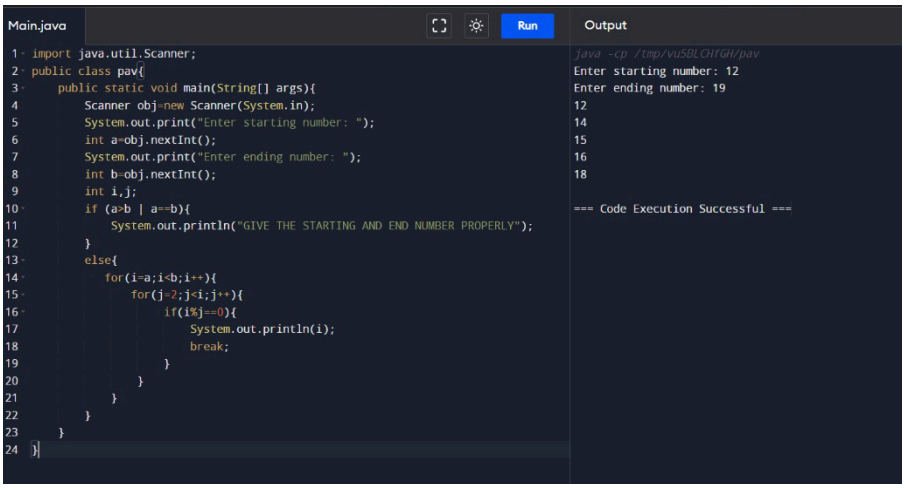
Sample Output

14, 15, 16, 18

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;
            }
          }
        }
      }
   }
}
```

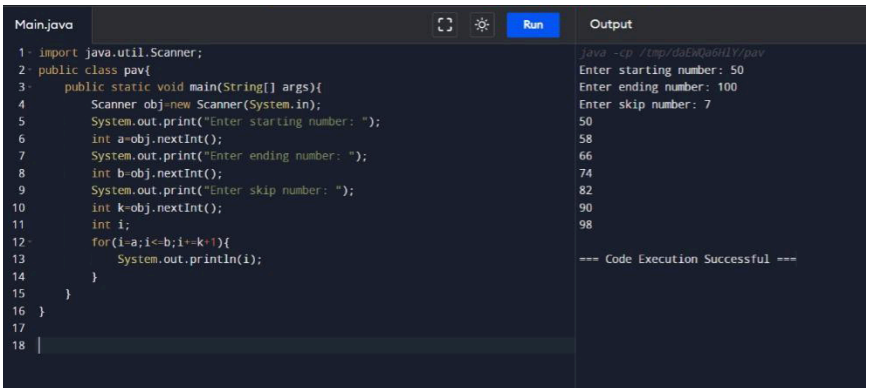


2. Write a program to print the numbers from M to N by skipping K numbers in between?

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);
        }
    }
}
```

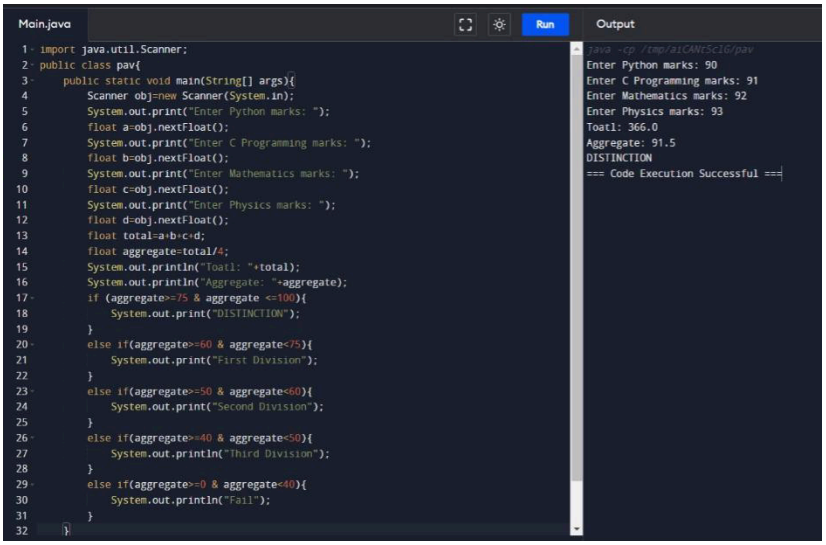


3. Write a program to enter the marks of a student in four subjects. Then calculate the total and aggregate, display the grade obtained by the student. If the student scores an aggregate greater than 75%, then the grade is Distinction. If aggregate is 60>= and <75, then the grade is First Division. If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

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**

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);
        }
    }
}
```