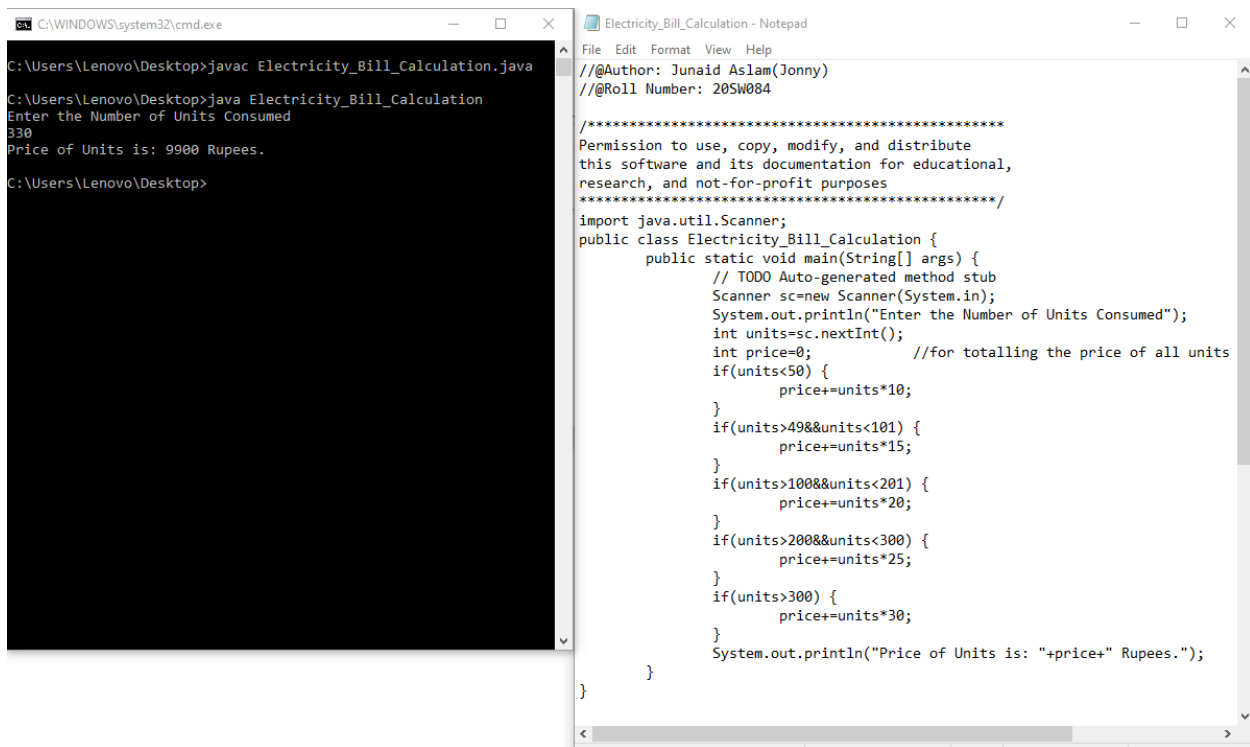


Output Screenshot's

Task 1:



```
C:\WINDOWS\system32\cmd.exe
C:\Users\Lenovo\Desktop>javac Electricity_Bill_Calculation.java
C:\Users\Lenovo\Desktop>java Electricity_Bill_Calculation
Enter the Number of Units Consumed
330
Price of Units is: 9900 Rupees.
C:\Users\Lenovo\Desktop>
```

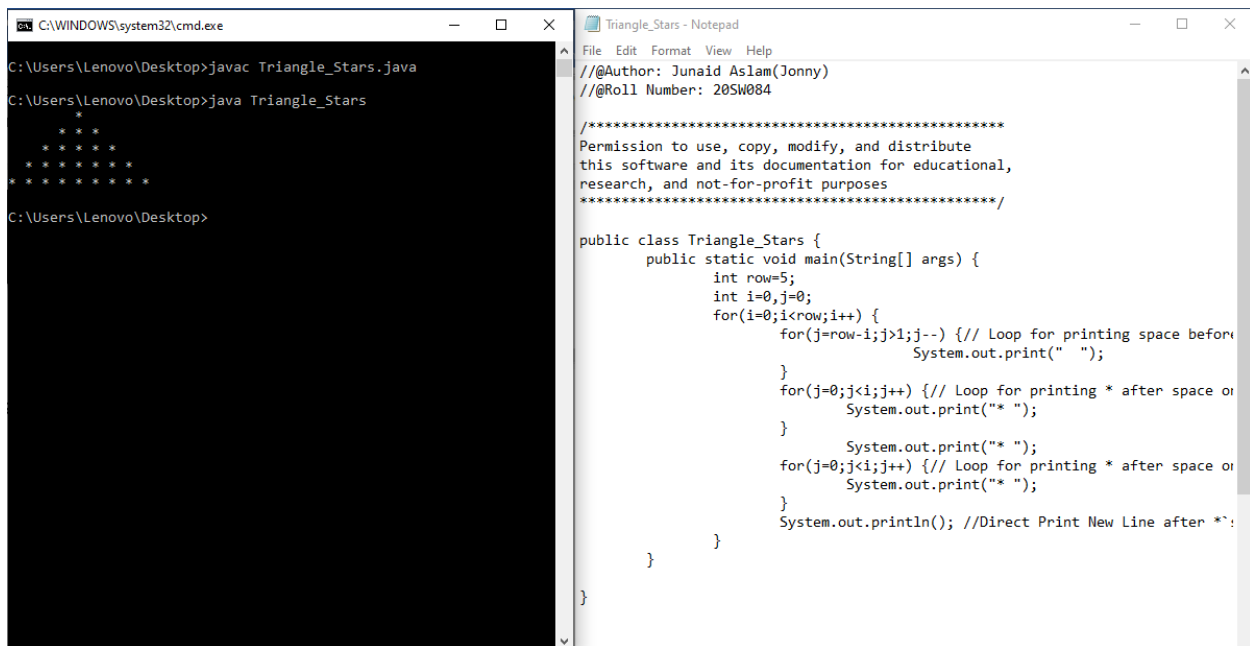
```
Electricity_Bill_Calculation - Notepad
File Edit Format View Help
//@Author: Junaaid Aslam(Jonny)
//@Roll Number: 20SW084

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import java.util.Scanner;
public class Electricity_Bill_Calculation {
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the Number of Units Consumed");
        int units=sc.nextInt();
        int price=0; //for totalling the price of all units
        if(units<50) {
            price+=units*10;
        }
        if(units>49&&units<101) {
            price+=units*15;
        }
        if(units>100&&units<201) {
            price+=units*20;
        }
        if(units>200&&units<300) {
            price+=units*25;
        }
        if(units>300) {
            price+=units*30;
        }
        System.out.println("Price of Units is: "+price+" Rupees.");
    }
}
```

Task 2:

(i) Print Stars Triangle:



```
C:\WINDOWS\system32\cmd.exe
C:\Users\Lenovo\Desktop>javac Triangle_Stars.java
C:\Users\Lenovo\Desktop>java Triangle_Stars
  *
 * *
* * *
* * * *
* * * * *
C:\Users\Lenovo\Desktop>
```

```
Triangle_Stars - Notepad
File Edit Format View Help
//@Author: Junaaid Aslam(Jonny)
//@Roll Number: 20SW084

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public class Triangle_Stars {
    public static void main(String[] args) {
        int row=5;
        int i=0,j=0;
        for(i=0;i<row;i++) {
            for(j=row-i;j>1;j--) { // Loop for printing space before
                System.out.print(" ");
            }
            for(j=0;j<i;j++) { // Loop for printing * after space on
                System.out.print("* ");
            }
            System.out.print("\n");
            for(j=0;j<i;j++) { // Loop for printing * after space on
                System.out.print("* ");
            }
            System.out.println(); //Direct Print New Line after **
        }
    }
}
```

(ii) Print Numbers Triangle:

```
C:\WINDOWS\system32\cmd.exe
C:\Users\Lenovo\Desktop>javac Triangle_Stars.java
C:\Users\Lenovo\Desktop>java Triangle_Stars
  *
 * *
 * * *
 * * * *
 * * * * *

C:\Users\Lenovo\Desktop>javac Triangle_Numbers.java
C:\Users\Lenovo\Desktop>java Triangle_Numbers
  1
 2 3 2
3 4 5 4 3
4 5 6 7 6 5 4
5 6 7 8 9 8 7 6 5

C:\Users\Lenovo\Desktop>

Triangle_Numbers - Notepad
File Edit Format View Help
//@Author: Junaid Aslam(Jonny)
//@Roll Number: 20SW084

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public class Triangle_Numbers {
    public static void main(String[] args) {
        int row=9;
        int i=0,j=0;
        for(i=1;i<=row;i+=2) {
            for(j=row-i;j>1;j-=2) { // Loop for printing space before
                System.out.print(" ");
            }
            int k=0;
            for(j=i;j>=2;j-=2) { // Loop for get number of times
                k++;
            }
            for(j=i;j>=2;j-=2) { // Loop for printing * after space
                System.out.print((i-k)+" ");
                k--;
            }
            System.out.print(i+" ");
            k=1;
            for(j=i;j>=2;j-=2) { // Loop for printing * after space
                System.out.print((i-k)+" ");
                k++;
            }
            System.out.println(); //Direct Print New Line after **
        }
    }
}
```

(ii) Print Numbers Triangle:

(iii) Inverted Right Triangle:

```
C:\WINDOWS\system32\cmd.exe
C:\Users\Lenovo\Desktop>javac Triangle_Stars.java
C:\Users\Lenovo\Desktop>java Triangle_Stars
  *
 * *
 * * *
 * * * *
 * * * * *

C:\Users\Lenovo\Desktop>javac Triangle_Numbers.java
C:\Users\Lenovo\Desktop>java Triangle_Numbers
  1
 2 3 2
3 4 5 4 3
4 5 6 7 6 5 4
5 6 7 8 9 8 7 6 5

C:\Users\Lenovo\Desktop>javac Inverted_Stars.java
C:\Users\Lenovo\Desktop>java Inverted_Stars
*****
****
***
**
*

C:\Users\Lenovo\Desktop>

Inverted_Stars - Notepad
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//@Roll Number: 20SW084

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public class Inverted_Stars {
    public static void main(String[] args) {
        for(int i=5;i>0;i--) {
            for(int j=0;j<i;j++) {
                System.out.print("*");
            }
            System.out.println();
        }
    }
}
```

Task 3:

The screenshot shows a Java IDE with two windows. The left window is a command prompt titled 'C:\WINDOWS\system32\cmd.exe' showing the execution of a Java program. The right window is a Notepad editor titled 'Table_Task - Notepad' showing the source code of the program.

```
C:\Users\Lenovo\Desktop>javac Square_Task.java
C:\Users\Lenovo\Desktop>java Square_Task
Enter Number to find Square
30
Square is 900

C:\Users\Lenovo\Desktop>javac Table_Task.java
C:\Users\Lenovo\Desktop>java Table_Task
Enter Starting Point
5
Enter Ending Point
10
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
C:\Users\Lenovo\Desktop>
```

```
import java.util.*;

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public class Table_Task
{
    public static void main(String[] args) {
        int start=0;
        int end=0;
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter Starting Point");
        start=sc.nextInt();
        System.out.println("Enter Ending Point");
        end=sc.nextInt();
        for(int i=start;i<=end;i++){
            System.out.println("5 x "+i+" = "+(5*i));
        }
    }
}
```

Task 4:

The screenshot shows a Java IDE with two windows. The left window is a command prompt titled 'C:\WINDOWS\system32\cmd.exe' showing the execution of a Java program. The right window is a Notepad editor titled 'FibonacciSeries_Task - Notepad' showing the source code of the program.

```
C:\Users\Lenovo\Desktop>javac Square_Task.java
C:\Users\Lenovo\Desktop>java Square_Task
Enter Number to find Square
30
Square is 900

C:\Users\Lenovo\Desktop>javac Table_Task.java
C:\Users\Lenovo\Desktop>java Table_Task
Enter Starting Point
5
Enter Ending Point
10
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50

C:\Users\Lenovo\Desktop>javac FibonacciSeries_Task.java
C:\Users\Lenovo\Desktop>java FibonacciSeries_Task
Enter Number of Terms
10
1 1 2 3 5 8 13 21 34
C:\Users\Lenovo\Desktop>
```

```
import java.util.*;

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public class FibonacciSeries_Task
{
    public static void main(String[] args) {
        int n;
        int first=1;
        int next=1;
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter Number of Terms");
        n=sc.nextInt();
        System.out.print(first+" "+next+" ");
        for(int i=3;i<=n;i++){
            int temp=next;
            next=first+next;
            first=temp;
            System.out.print(next+" ");
        }
    }
}
```

Task 5:

The image shows a Windows desktop environment with two windows. The left window is a Command Prompt titled 'C:\WINDOWS\system32\cmd.exe'. It shows the execution of a Java program: `javac Square_Task.java`, `java Square_Task`, followed by the input `30` and the output `Square is 900`. The right window is a Notepad titled 'Square_Task - Notepad'. It contains the source code for the `Square_Task` program, which includes a header with author and roll number information, a license statement, and the Java code that uses a `Scanner` to read an integer and calculate its square using a loop.

```
C:\WINDOWS\system32\cmd.exe
C:\Users\Lenovo\Desktop>javac Square_Task.java
C:\Users\Lenovo\Desktop>java Square_Task
Enter Number to find Square
30
Square is 900
C:\Users\Lenovo\Desktop>
```

```
File Edit Format View Help
//@Author: Junaaid Aslam(Jonny)
//@Roll Number: 205W084

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*****/

import java.util.*;
public class Square_Task
{
    public static void main(String[] args) {
        int n;
        int square=0;
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter Number to find Square");
        n=sc.nextInt();
        for(int i=0;i<n;i++){
            square+=n;
        }
        System.out.println("Square is "+square);
    }
}
```