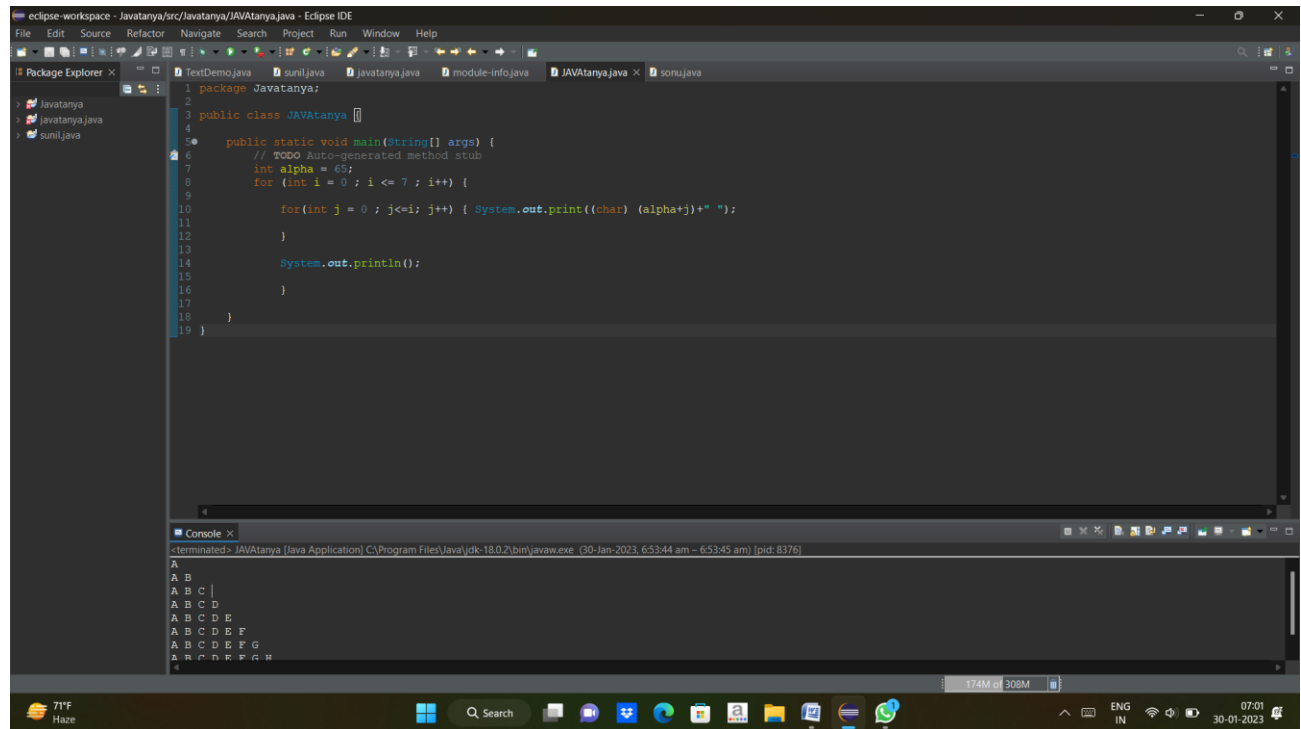


Question 1 = Write a program(WAP) to print Alphabets A,B,C,D,E,F,G,H, using pattern programming logic.

Answer =



The screenshot shows the Eclipse IDE with a Java project named 'Javatanya'. The main class is 'JAVATanya'. The code in the 'main' method is as follows:

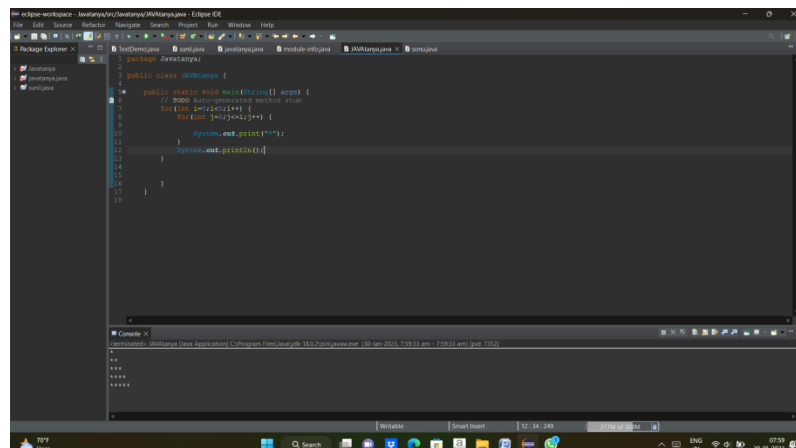
```
1 package Javatanya;
2
3 public class JAVATanya {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         int alpha = 65;
8         for (int i = 0 ; i <= 7 ; i++) {
9
10             for(int j = 0 ; j<=i; j++) { System.out.print((char) (alpha+j)+" ");
11
12             }
13
14             System.out.println();
15
16         }
17
18     }
19 }
```

The console output shows the following pattern:

```
A
A B C
A B C D
A B C D E
A B C D E F
A B C D E F G
A B C D E F G H
```

Question 2 = Write a program to print triangle using star pattern programming logic.

Answer



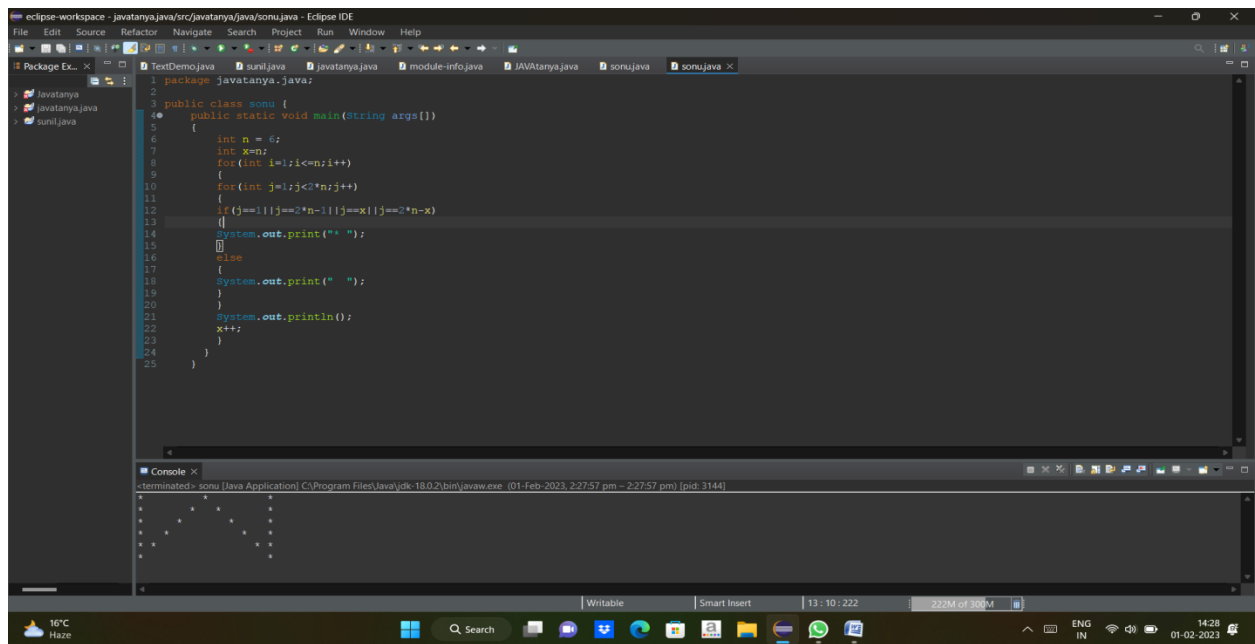
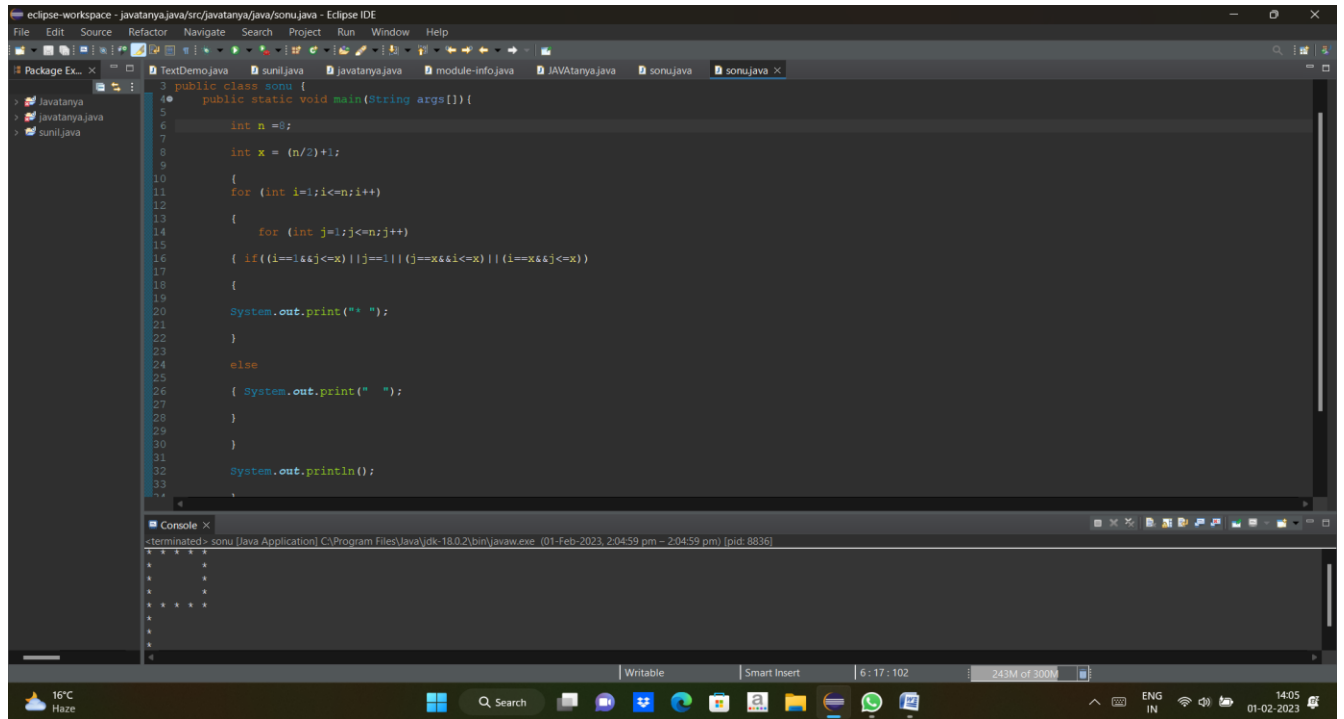
The screenshot shows the Eclipse IDE with a Java project named 'Javatanya'. The main class is 'JAVATanya'. The code in the 'main' method is as follows:

```
1 package Javatanya;
2
3 public class JAVATanya {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         for(int i=1;i<=5;i++) {
8             for(int j=1;j<=i;j++) {
9                 System.out.print("*");
10            }
11            System.out.println();
12        }
13    }
14 }
```

The console output shows the following star pattern triangle:

```
*****
****
***
**
*
```

Answer = PW SKILLS.



The screenshot shows the Eclipse IDE with a Java project named 'javatanyajava'. The source file 'sonu.java' contains the following code:

```
1 package javatanyajava;
2
3 public class sonu {
4     public static void main(String args[])
5     {
6         int n = 7;
7         int g=n;
8         for (int i=1;i<=n;i++)
9         {
10             for (int j=1;j<=n;j++)
11             {
12                 if (i==1||i==n||i==n/2+1|| (j==1&&i<=n/2+1)|| (j==n&&i>n/2+1))
13                 {
14                     System.out.print(" * ");
15                 }
16                 else
17                 {
18                     System.out.print(" ");
19                 }
20             }
21             System.out.println();
22             x++;
23         }
24     }
25 }
```

The console output shows a diamond pattern of asterisks:

```
*
 *
* *
* *
* *
* *
* *
*
 *
*
```

The IDE status bar shows '7:17:117' and '245M of 300M'.

The screenshot shows the Eclipse IDE with the same Java project 'javatanyajava'. The source file 'sonu.java' contains the following code:

```
1 package javatanyajava;
2
3 public class sonu {
4     public static void main(String args[])
5     {
6         int n = 7;
7         int x = n/2+1;
8         for (int i=1;i<=n;i++)
9         {
10             for (int j=1;j<=x;j++)
11             {
12                 if (j==1||j==x)
13                 {
14                     System.out.print(" * ");
15                 }
16                 else
17                 {
18                     System.out.print(" ");
19                 }
20             }
21             if (i<=n/2)
22             {
23                 x--;
24             }
25             else
26             {
27                 x++;
28             }
29             System.out.println();
30         }
31     }
32 }
```

The console output shows a diamond pattern of asterisks:

```
*
 *
* *
* *
* *
* *
*
 *
*
```

The IDE status bar shows '8:30:147' and '230M of 300M'.

The screenshot shows the Eclipse IDE with a Java project named 'javatanya'. The package 'javatanya.java' contains a class 'sonu' with a 'main' method. The code is as follows:

```
1 package javatanya.java;
2
3 public class sonu {
4     public static void main(String args[]) {
5         int n=0;
6         for (int i=1;i<=n;i++)
7         {
8             for (int j=1;j<=n;j++)
9             {
10                 if (j==1 || i==n && j<= (n/2)+1)
11                 {
12                     System.out.print(" ");
13                 }
14             }
15             System.out.println();
16         }
17     }
18 }
```

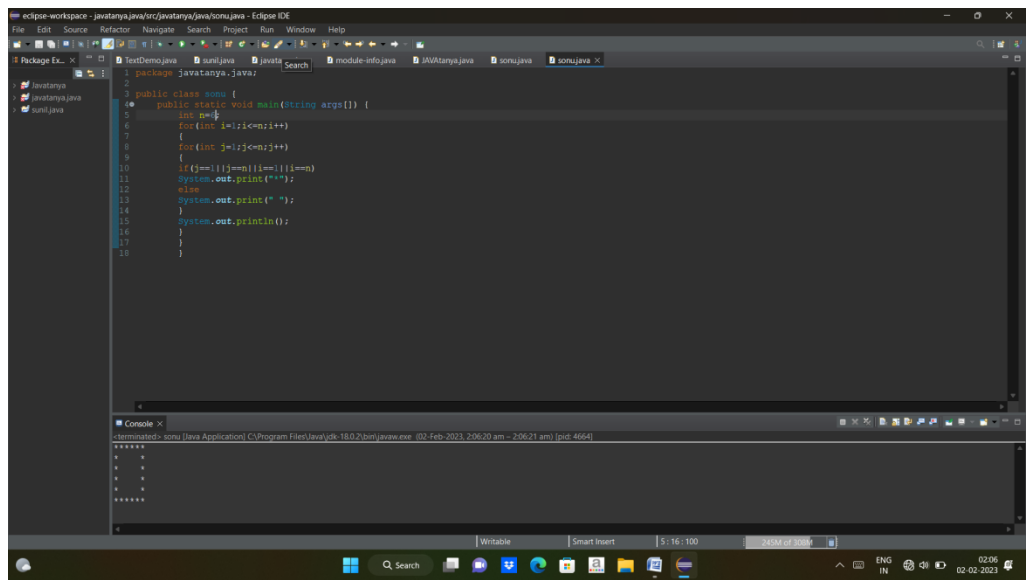
The console output shows the program running successfully, printing a diamond pattern of asterisks. The status bar at the bottom indicates the file is 'Writable' and 'Smart Insert' is active. The system tray shows the date as 02-02-2023.

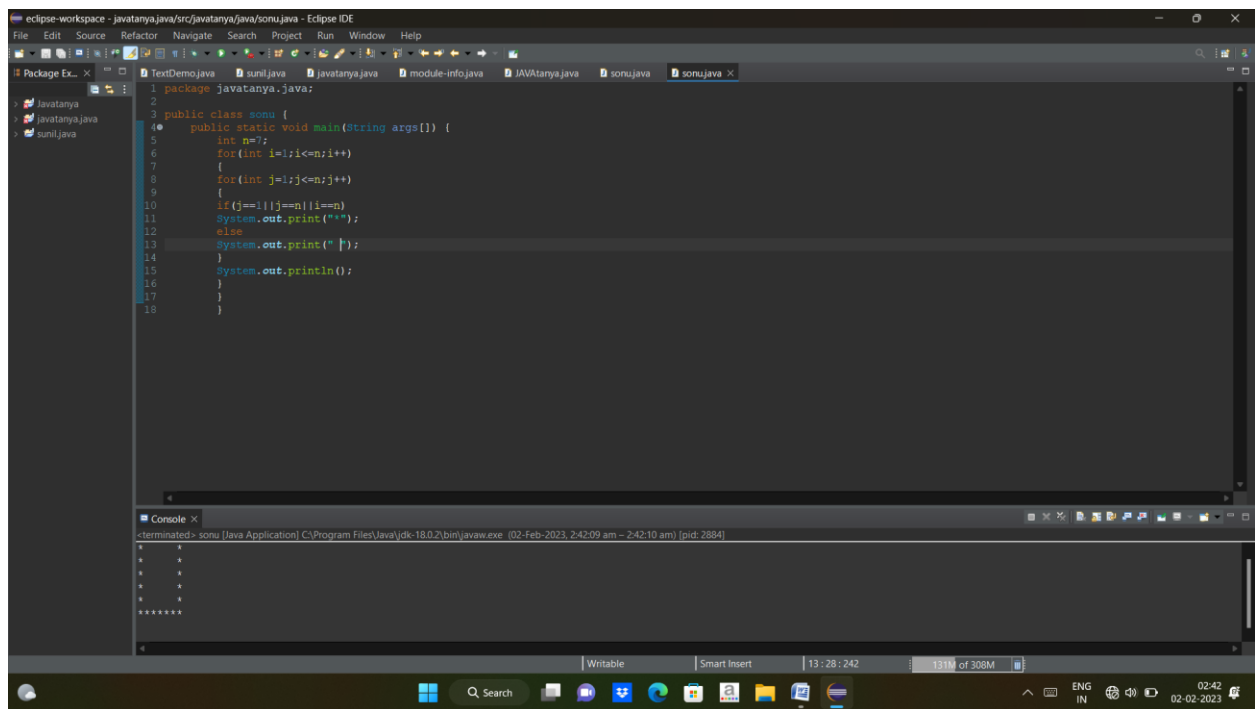
The screenshot shows the Eclipse IDE with a Java project named 'javatanya'. The package 'javatanya.java' contains a class 'sonu' with a 'main' method. The code is as follows:

```
1 package javatanya.java;
2
3 public class sonu {
4     public static void main(String args[])
5     {
6         int n = 7;
7         int x=n;
8         for (int i=1;i<=n;i++)
9         {
10             for (int j=1;j<=n;j++)
11             {
12                 if (i==1 || i==n || i==n/2+1 || (j==1 && i<=n/2+1) || (j==n && i>n/2+1))
13                 {
14                     System.out.print(" ");
15                 }
16                 else
17                 {
18                     System.out.print(" ");
19                 }
20             }
21             System.out.println();
22             x++;
23         }
24     }
25 }
```

The console output shows the program running successfully, printing a diamond pattern of asterisks. The status bar at the bottom indicates the file is 'Writable' and 'Smart Insert' is active. The system tray shows the date as 02-02-2023.

Answer = SONU RAJBHAR.





```
1 package javatanya.javaz;
2
3 public class sonu {
4     public static void main(String args[]) {
5         int n = 5;
6         int x = 1;
7         for(int i=1; i<=n; i++){
8             for (int j=1; j<=n/2+1; j++){
9                 if (j==1 || i==1 || i==n/2+1 || (i<=n/2 & j==n/2+1) || j==x)
10                    { System.out.print(" * ");
11                      }
12                 else
13                 {
14                     System.out.print(" ");
15                 }
16             }
17             if (i>n/2)
18             {
19                 x++;
20             }
21             System.out.println();
22         }
23     }
24 }
25
26
```

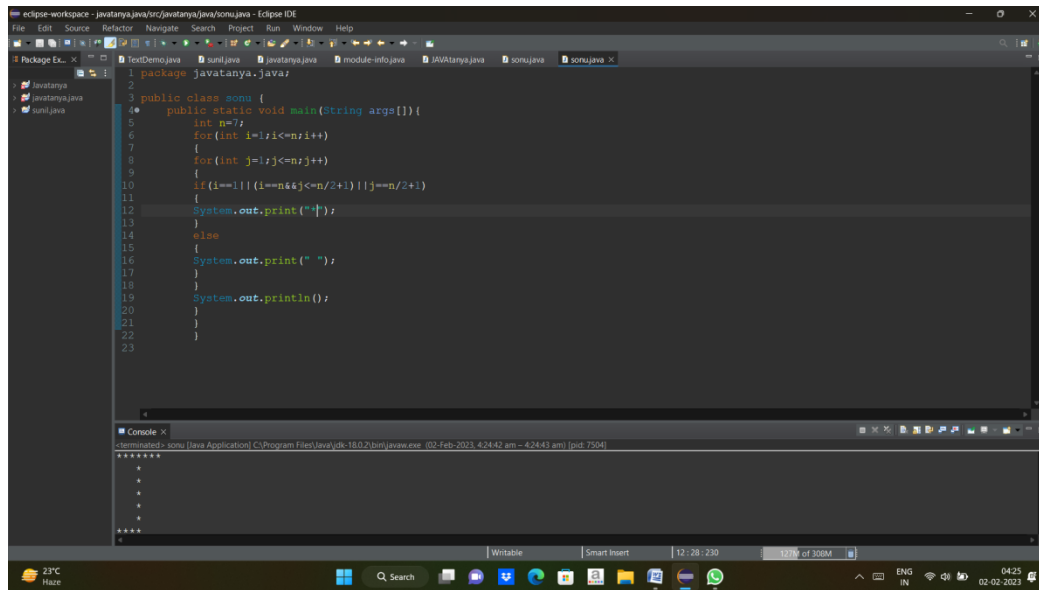
Console output:

```
* * *
* * *
* * *
* * *
* * *
```

```
1 package javatanya.java;
2
3 public class sonu {
4     public static void main(String args[]) {
5         int n = 5;
6         int x=n;
7         for(int i=1; i<=n; i++){
8             for(int j=1; j<=2*n; j++){
9                 if (j==x || j==n+i-1)
10                    { System.out.print(" * ");
11                      }
12                 else if ((j>=x) != false && j<=n+i-1 && i==n/2+1)
13                 {
14                     System.out.print(" * ");
15                 }
16                 else
17                 {
18                     System.out.print(" ");
19                 }
20             }
21             System.out.println();
22             x--;
23         }
24     }
25 }
26
27
28
29
```

Console output:

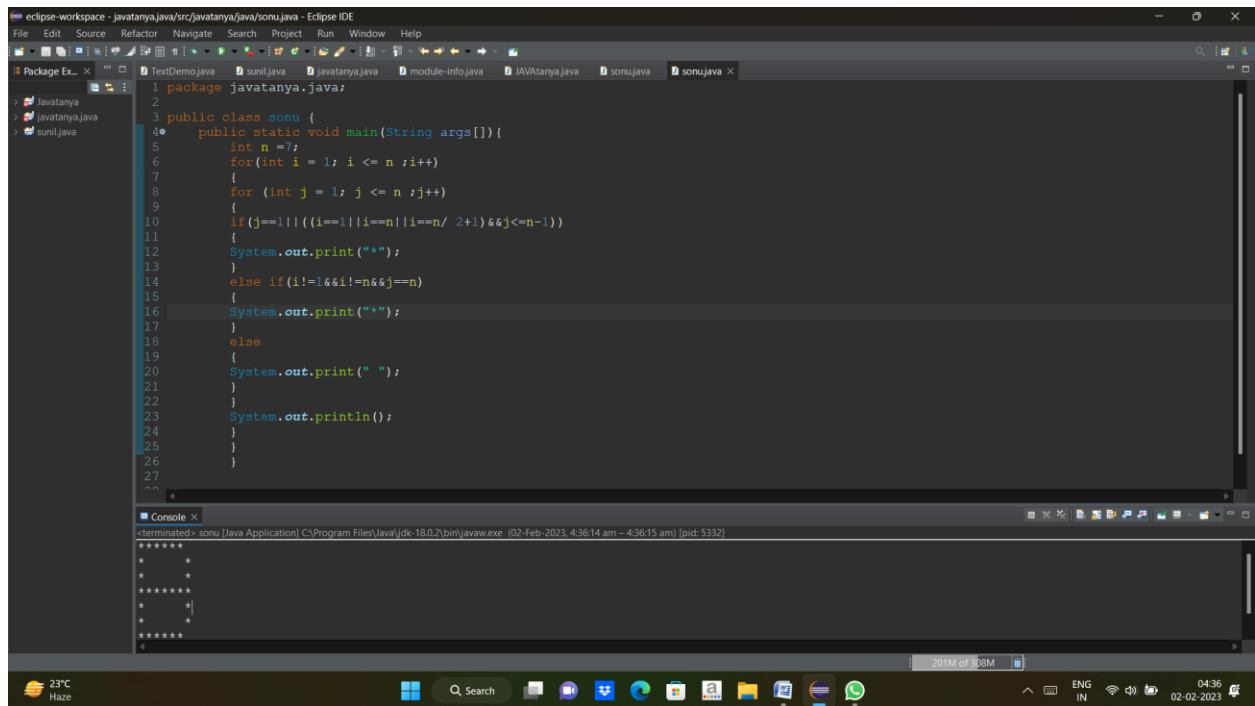
```
* * *
* * *
* * *
* * *
* * *
```

```
1 package javatanya.java;
2
3 public class sonu {
4     public static void main(String args[]){
5         int n=7;
6         for(int i=1;i<=n;i++)
7         {
8             for(int j=1;j<=n;j++)
9             {
10                 if(i==1 || (i==n&&j<=n/2+1) || j==n/2+1)
11                 {
12                     System.out.print("*");
13                 }
14                 else
15                 {
16                     System.out.print(" ");
17                 }
18             }
19             System.out.println();
20         }
21     }
22 }
23
```

Console Output:

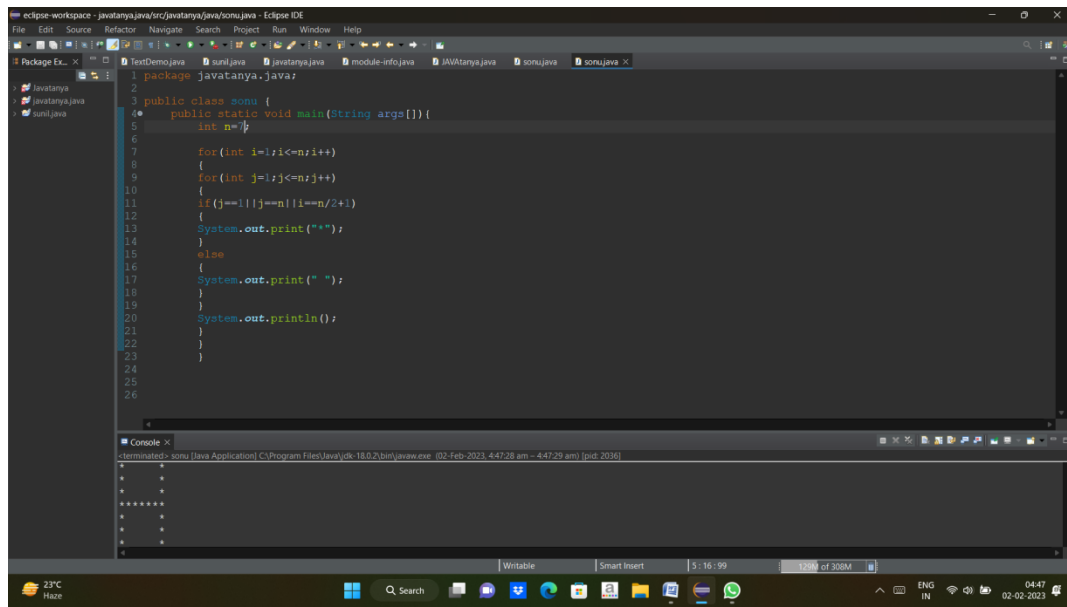
```
*****
*
*
*****
*
*
*****
```



```
1 package javatanya.java;
2
3 public class sonu {
4     public static void main(String args[]){
5         int n =7;
6         for(int i = 1; i <= n ;i++)
7         {
8             for (int j = 1; j <= n ;j++)
9             {
10                 if(j==1 || ((i==1 || i==n || i==n/ 2+1) &&j<=n-1))
11                 {
12                     System.out.print("*");
13                 }
14                 else if(i!=1&&i!=n&&j==n)
15                 {
16                     System.out.print("*");
17                 }
18                 else
19                 {
20                     System.out.print(" ");
21                 }
22             }
23             System.out.println();
24         }
25     }
26 }
27
```

Console Output:

```
*****
*
*
*****
*
*
*****
```



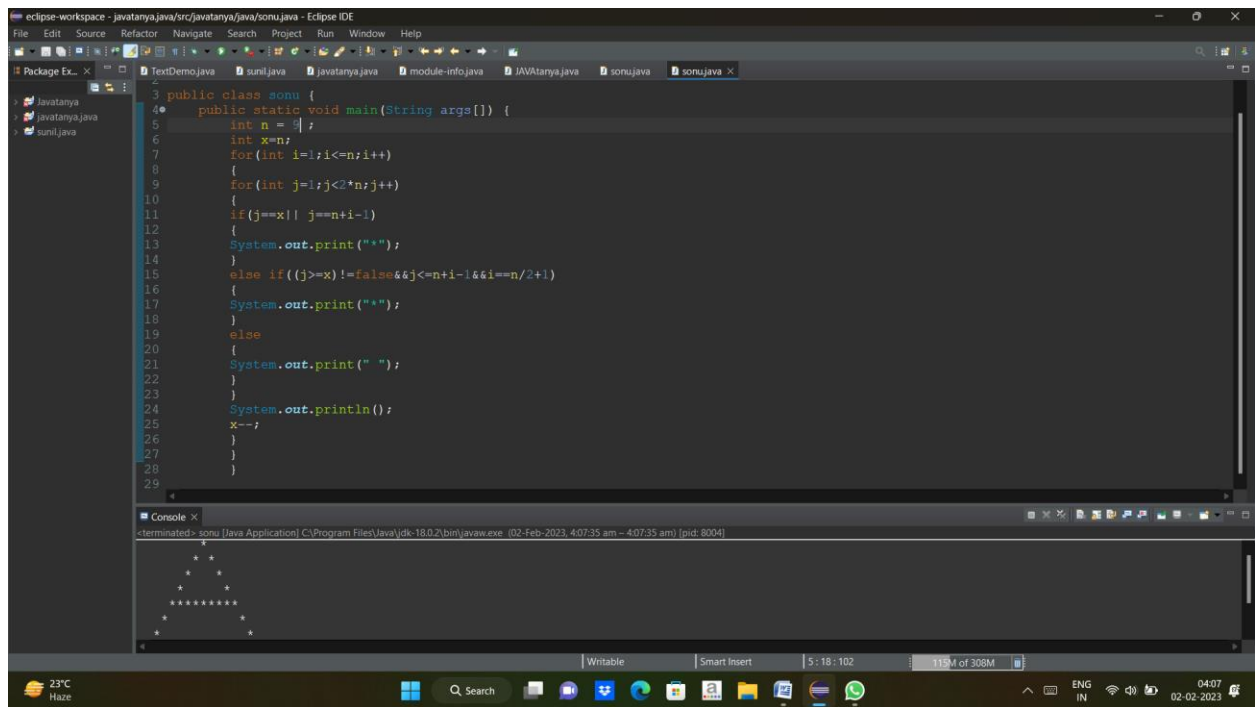
The screenshot shows the Eclipse IDE with a Java project named 'javatanya'. The source code for 'sonu.java' is displayed in the editor. The code defines a public class 'sonu' with a static method 'main' that takes an array of strings as an argument. Inside the 'main' method, an integer 'n' is initialized to 7. Two nested loops are used to print a diamond pattern of asterisks. The outer loop iterates from 'i=1' to 'i=n', and the inner loop iterates from 'j=1' to 'j=n'. The condition for printing an asterisk is 'if(j==i||j==n-i+1)'. The output is shown in the console window, displaying a diamond shape of asterisks.

```
package javatanya.java;

public class sonu {
    public static void main(String args[]) {
        int n=7;
        for(int i=1;i<=n;i++)
        {
            for(int j=1;j<=n;j++)
            {
                if(j==i||j==n-i+1)
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

Console Output:

```
*
* *
* * *
* * * *
* * * * *
* * * * *
* * * *
* * *
* *
*
```



The screenshot shows the Eclipse IDE with the same Java project 'javatanya'. The source code for 'sonu.java' is displayed in the editor. The code defines a public class 'sonu' with a static method 'main' that takes an array of strings as an argument. Inside the 'main' method, an integer 'n' is initialized to 7, and a variable 'x' is initialized to 'n'. Two nested loops are used to print a diamond pattern of asterisks. The outer loop iterates from 'i=1' to 'i=n', and the inner loop iterates from 'j=1' to 'j=n'. The condition for printing an asterisk is 'if(j==x||j==n-i+1)'. The output is shown in the console window, displaying a diamond shape of asterisks.

```
public class sonu {
    public static void main(String args[]) {
        int n = 7;
        int x=n;
        for(int i=1;i<=n;i++)
        {
            for(int j=1;j<=n;j++)
            {
                if(j==x||j==n-i+1)
                {
                    System.out.print("*");
                }
                else if((j>=x)!=false&&j<=n-i-1&&i==n/2+1)
                {
                    System.out.print(" ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
            x--;
        }
    }
}
```

Console Output:

```
*
* *
* * *
* * * *
* * * * *
* * * * *
* * * *
* * *
* *
*
```

