Assignment 4

1. Write a Java code to display the following patterns

a)

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

CODE:-

```
public class OOP_Assignment_4 {

    public static void main(String[] args) {
        int i, j,k;

        for(i=5; i>=1; --i){

        for(j=i; j<=6; ++j){

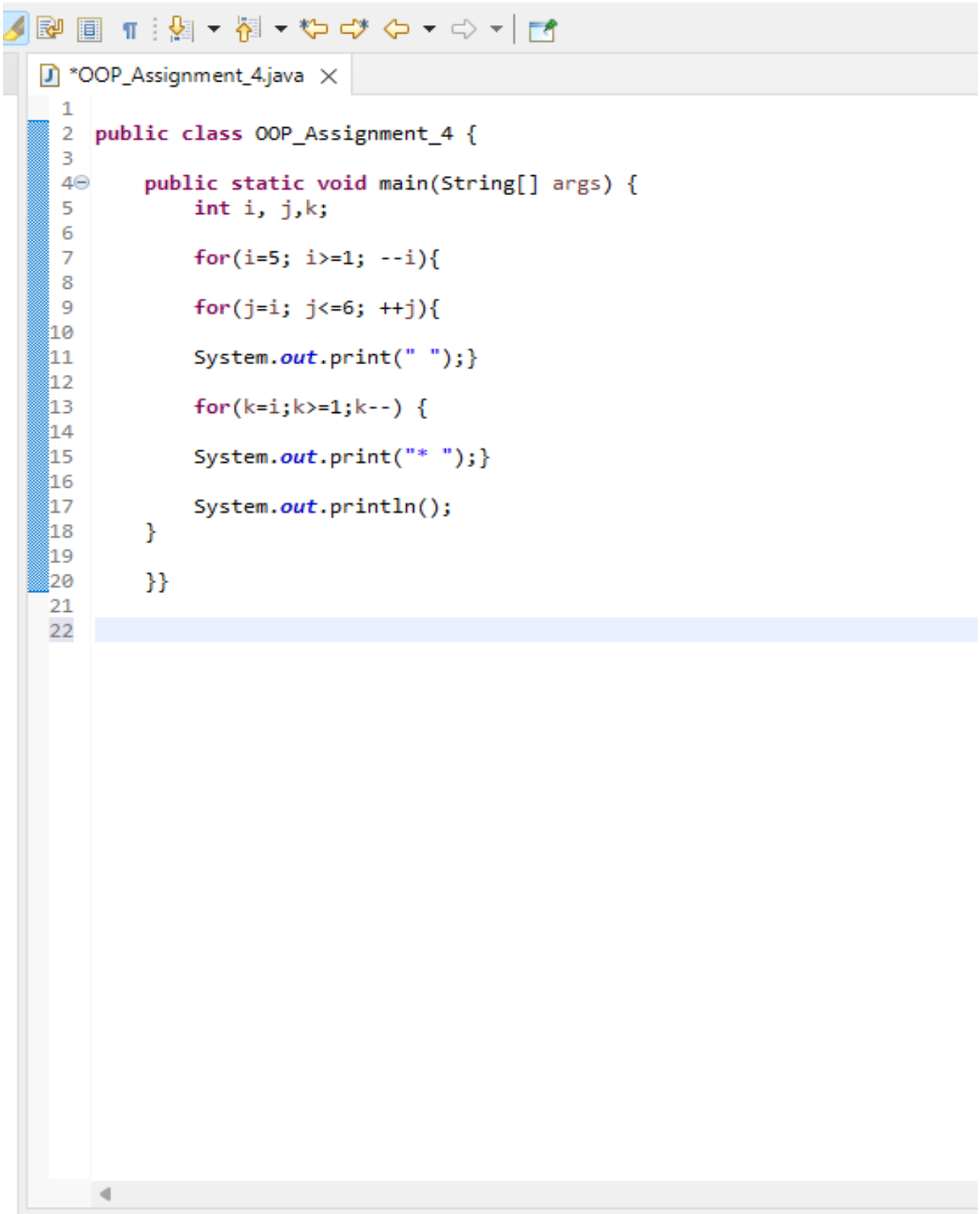
        System.out.print(" ");}

        for(k=i;k>=1;k--) {

        System.out.print("* ");}

        System.out.println();
    }

    }}
```


*OOP_Assignment_4.java
public class OOP_Assignment_4 {
public static void main(String[] args) {
int i, j,k;
for(i=5; i>=1; --i){
for(j=i; j<=6; ++j){
System.out.print(" ");}
for(k=i;k>=1;k--) {
System.out.print("* ");}
System.out.println();
}
}}
Problems
Javadoc
Declaration
Console
<terminated> OOP_Assignment_4 [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.o
* * * * *
* * * *
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*

b)

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

CODE:-

```
public class OOP_Assignment_4 {

public static void main(String[] args) {
       int n=5;


      for (int i=0; i<=n; i++)

        {

            for (int j=0; j<=i; j++)

                {

                   System.out.print("*");

                }

            System.out.println();

        }




       for (int i=n; i>=1; i--)

       {

            for (int j=1; j<=i; j++)

                {

                   System.out.print("*");

                }

            System.out.println();}


  }}
```

*OOP_Assignment_4.java

```
1
2  public class OOP_Assignment_4 {
3
4      public static void main(String[] args) {
5          int n=5;
6
7
8
9              for (int i=0; i<=n; i++)
10
11                 {
12
13                     for (int j=0; j<=i; j++)
14
15                         {
16
17                             System.out.print("*");
18
19                         }
20
21                     System.out.println();
22
23                 }
24
25
26
27
28
29                 for (int i=n; i>=1; i--)
30
31                 {
32
33                     for (int j=1; j<=i; j++)
34
35                         {
36
37                             System.out.print("*");
38
39                         }
40
41                     System.out.println();
42     }
43
44     }}
```

Problems | Javadoc | Declaration | Console

<terminated> OOP_Assignment_4 [Java Application] C:\Users\HP\.p2\pool\plugins\

```
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```

c)

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

CODE:-

```
public class OOP_Assignment_4 {

	public static void main(String[] args) {
		int i,j,k,l,m,n;

		for(l=1;l<=6;++l) {

		for(m=6;m>=l;--m) {

		System.out.print(" ");}

		for(n=1;n<=l;n++) {

		System.out.print("* ");}

		System.out.println();}

		for(i=5; i>=1; --i){

		for(j=i; j<=6; ++j){

		System.out.print(" ");}

		for(k=i;k>=1;k--) {

		System.out.print("* ");}

		System.out.println();
	}

	}}
```

e IDE

Help

OOP_Assignment_4.java

```
1
2  public class OOP_Assignment_4 {
3
4      public static void main(String[] args) {
5          int i,j,k,l,m,n;
6
7          for(l=1;l<=6;++l) {
8
9          for(m=6;m>=l;--m) {
10
11         System.out.print(" ");}
12
13         for(n=1;n<=l;n++) {
14
15         System.out.print("* ");}
16
17         System.out.println();}
18
19         for(i=5; i>=1; --i){
20
21         for(j=i; j<=6; ++j){
22
23         System.out.print(" ");}
24
25         for(k=i;k>=1;k--) {
26
27         System.out.print("* ");}
28
29             System.out.println();
30     }
31
32     }}
33
34
```

Problems @ Javadoc Declaration Console

<terminated> OOP_Assignment_4 [Java Application] C:\Users\HP\.p2\pool

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

d)

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

CODE:-

```
public class OOP_Assignment_4 {

	public static void main(String[] args) {

		int i,j,k,l;

		for(i=1; i<=5; ++i){

		for(j=1; j<=9; ++j){

		k=Math.abs(5-j);

		if (k==i-1) {

		System.out.print("*");}

		else {

		System.out.print(" ");}

		}

		System.out.println();}


	}}
```

Help

OOP_Assignment_4.java

```java
public class OOP_Assignment_4 {

    public static void main(String[] args) {

            int i,j,k,l;

            for(i=1; i<=5; ++i){

            for(j=1; j<=9; ++j){

            k=Math.abs(5-j);

            if (k==i-1) {

            System.out.print("*");}

            else {

            System.out.print(" ");}

            }

            System.out.println();}


    }}
```

Problems Javadoc Declaration Console

<terminated> OOP_Assignment_4 [Java Application] C:\Users\HP\.p2\pool\

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

e)

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

CODE:-

```
public class OOP_Assignment_4 {

    public static void main(String[] args) {

        int i,j,k,l;

        for(i=1; i<=5; ++i){

        for(j=1; j<=9; ++j){

        k=Math.abs(5-j);

        if (k==5-i) {

        System.out.print("*");}

        else {

        System.out.print(" ");}

        }

        System.out.println();}


    }}
```

elp

OOP_Assignment_4.java

```
1
2  public class OOP_Assignment_4 {
3
4      public static void main(String[] args) {
5
6          int i,j,k,l;
7
8          for(i=1; i<=5; ++i){
9
10         for(j=1; j<=9; ++j){
11
12         k=Math.abs(5-j);
13
14         if (k==5-i) {
15
16         System.out.print("*");}
17
18         else {
19
20         System.out.print(" ");}
21
22         }
23
24         System.out.println();}
25
26
27     }}
28
29
```

Problems | Javadoc | Declaration | Console

<terminated> OOP_Assignment_4 [Java Application] C:\Users\HP\.p2\p

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

Date & Time: 04-12-2021, 5 PM

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Naming format for the document:

Batch 'A' students - 'A_name.docx'

Batch 'B' students - 'B_name.docx'