

Date : 21-10-2022

1. Write a program(WAP) to print INEURON using pattern programming logic.

The screenshot shows an IDE with a Java application named 'assignment/src/assignment/question1.java'. The code is as follows:

```

1 package assignment;
2
3 public class question1 {
4
5     public static void main(String[] args) {
6
7         int n=10;
8         for(int i=0; i<n; i++)
9         {
10             for(int j=0; j<n; j++)
11             {
12                 if(i==0 || i==n-1 || j==n/2 && i>0 && i<n-1) // for alphabet I
13                 {
14                     System.out.print(" ");
15                 }
16                 else
17                 {
18                     System.out.print(" ");
19                 }
20             }
21             System.out.print("\n");
22         }
23     }
24 }

```

The output window shows the result of running the program, which is the word 'WELCOME' printed using asterisks. The output is as follows:

```

*****
*   *   *   *   *   *   *   *   *   *
* * * * * * * * * * * * * * * * *
* * * * * * * * * * * * * * * *
* * * * * * * * * * * * * * * *
* * * * * * * * * * * * * * * *
* * * * * * * * * * * * * * * *
* * * * * * * * * * * * * * * *
* * * * * * * * * * * * * * * *
* * * * * * * * * * * * * * * *
*****

```

The IDE also shows a Package Explorer on the left with the project structure, and a Console window at the bottom showing the output of the program.

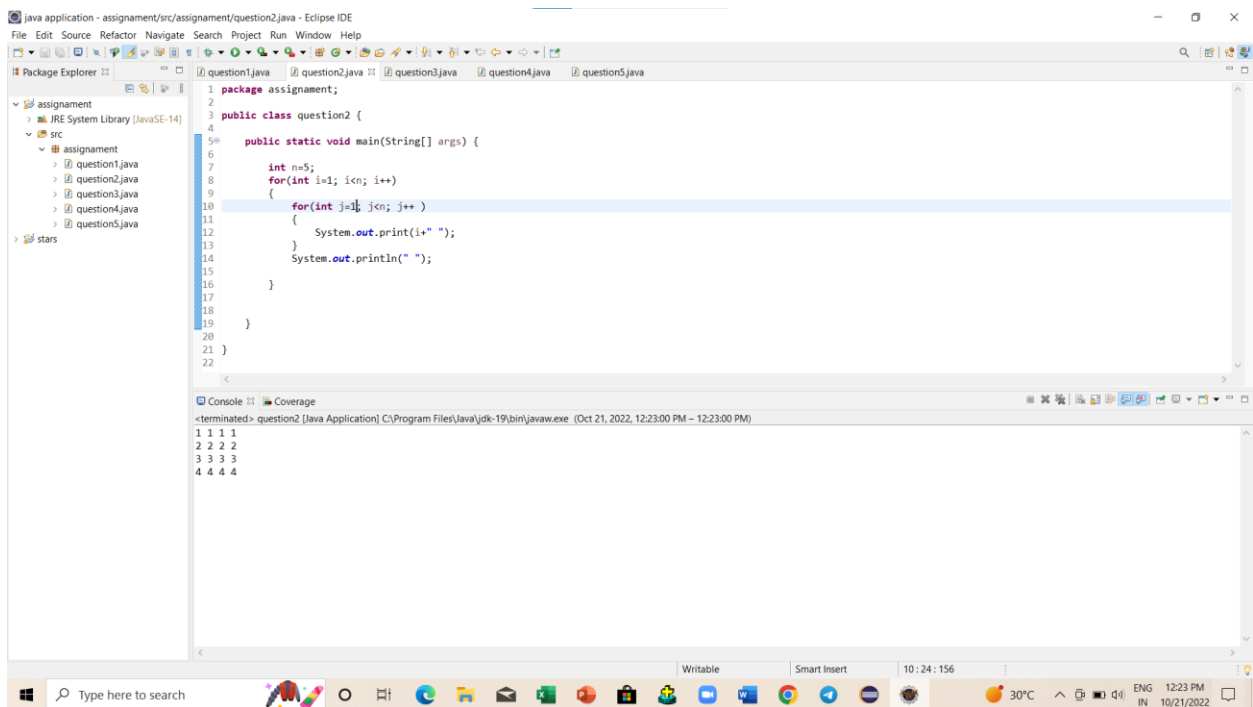
2. Write a program to print

1 1 1 1

2 2 2 2

3 3 3 3

4 4 4 4

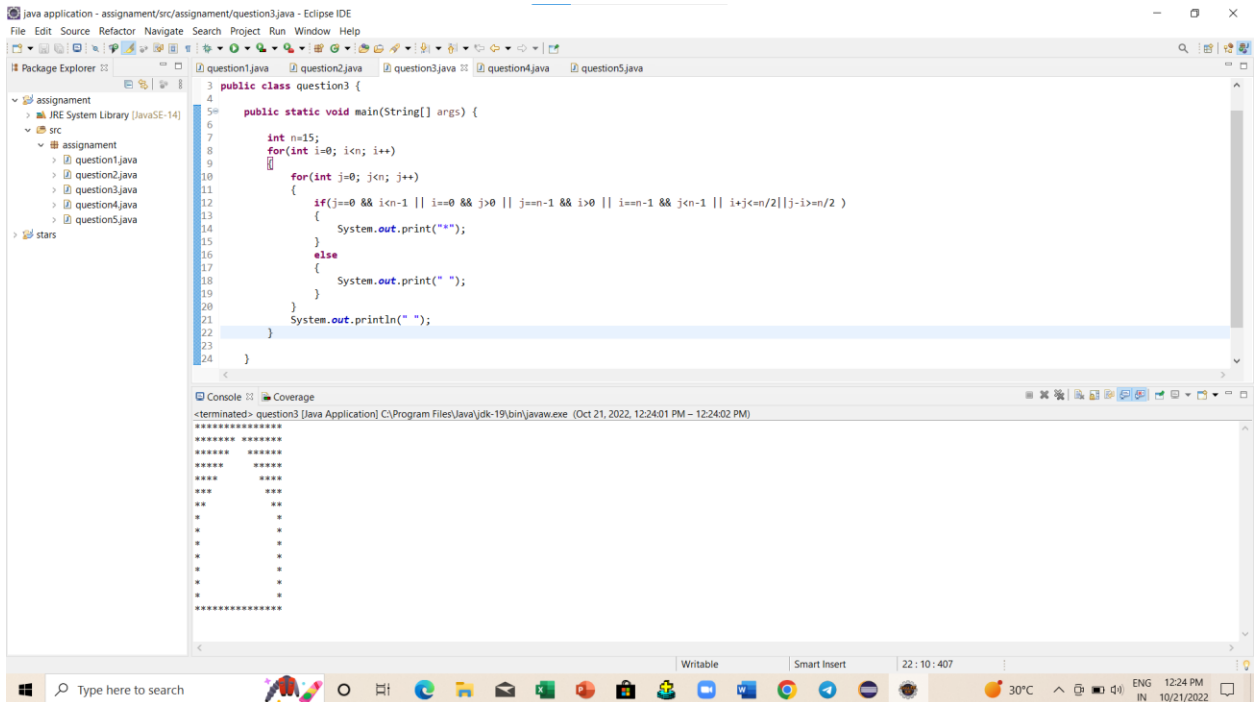


```
1 package assignment;
2
3 public class question2 {
4
5     public static void main(String[] args) {
6
7         int n=5;
8         for(int i=1; i<n; i++)
9         {
10             for(int j=1; j<n; j++)
11             {
12                 System.out.print(i+" ");
13             }
14             System.out.println(" ");
15         }
16     }
17 }
18
19
20
21 }
22 }
```

Console Output:

```
<terminated> question2 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Oct 21, 2022, 12:23:00 PM)
1 1 1 1
2 2 2 2
3 3 3 3
4 4 4 4
```

3. WAP to print



4. WAP to print



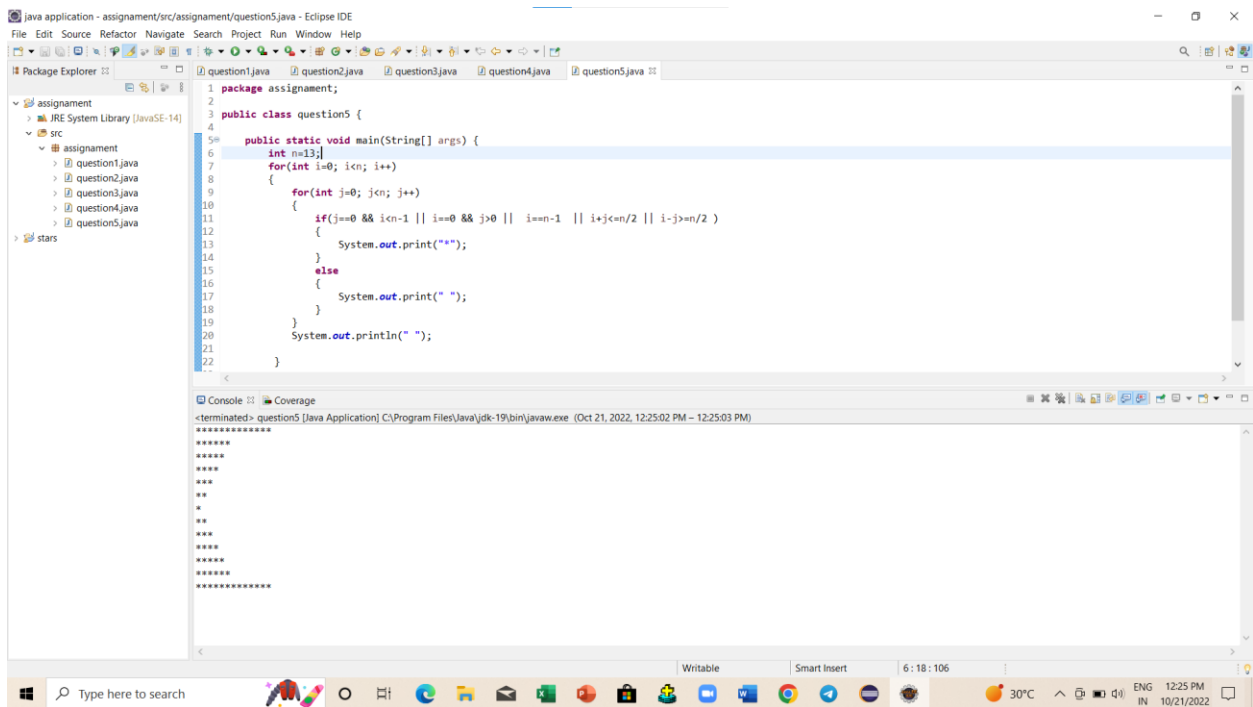
```
1 package assignment;
2
3 public class question4 {
4
5     public static void main(String[] args) {
6
7         int n=15;
8         for(int i=0; i<n; i++)
9         {
10             for(int j=0; j<n; j++)
11             {
12                 if(j==0 && i>n/2 && i<n-1 || i==n-1 || j==n-1 && i>n/2 && i<n-1 || i-j>n/2 || i+j>n+n/2-1 )
13                 {
14                     System.out.print(" ");
15                 }
16                 else
17                 {
18                     System.out.print(" *");
19                 }
20             }
21             System.out.println(" ");
22         }
23     }
24 }
```

Console: <terminated> question4 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Oct 21, 2022, 12:24:32 PM - 12:24:33 PM)

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

5. WAP to print

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



The screenshot shows the Eclipse IDE with the following components:

- Package Explorer:** Shows the project structure with 'assignment' as the root, containing 'src' and 'stars'.
- Editor:** Displays the code for 'question5.java'.
- Console:** Shows the output of the program, which is a pattern of stars.

Code in question5.java:

```
1 package assignment;
2
3 public class question5 {
4
5     public static void main(String[] args) {
6         int n=13;
7         for(int i=0; i<n; i++)
8         {
9             for(int j=0; j<n; j++)
10            {
11                if((j==0 && i<n-1 || i==0 && j>0 || i==n-1 || i+j<n/2 || i-j>n/2 )
12                {
13                    System.out.print("*");
14                }
15                else
16                {
17                    System.out.print(" ");
18                }
19            }
20            System.out.println(" ");
21        }
22    }
23 }
```

Output in Console:

```
<terminated> question5 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Oct 21, 2022, 12:25:02 PM - 12:25:03 PM)
*****
*****
*****
****
***
**
*
**
***
****
*****
*****
*****
*****
*****
```