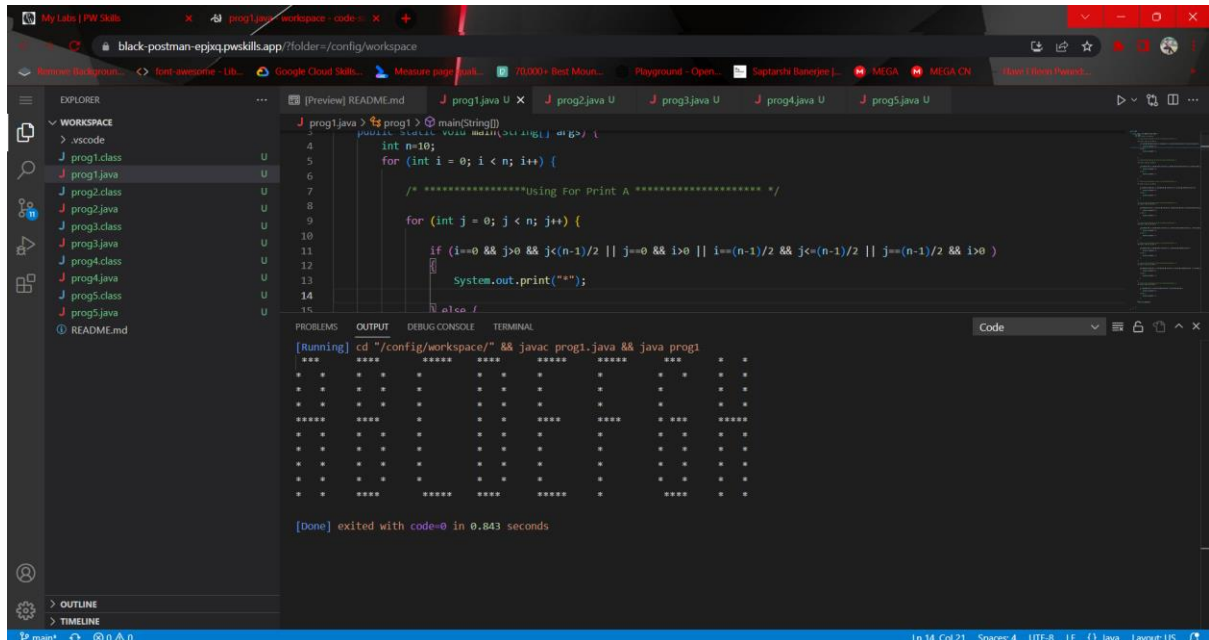


Pattern Programming

Question1

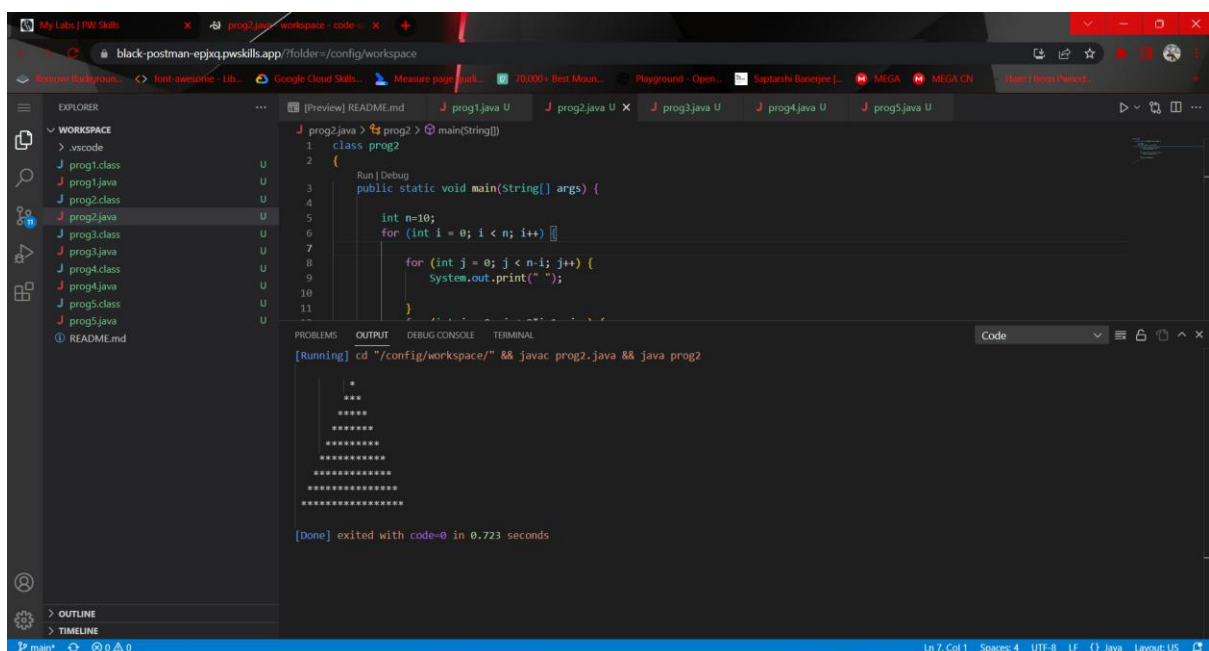


The screenshot shows a VS Code editor with a Java file named `prog1.java`. The code defines a `main` method that prints a diamond pattern of asterisks. The pattern consists of 10 rows. The first 5 rows are left-aligned, and the last 5 rows are right-aligned. The output in the terminal is as follows:

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

The terminal output shows the command `cd "/config/workspace/" && javac prog1.java && java prog1` and the result of the program execution.

Question2



The screenshot shows a VS Code editor with a Java file named `prog2.java`. The code defines a `main` method that prints a diamond pattern of asterisks. The pattern consists of 10 rows. The first 5 rows are left-aligned, and the last 5 rows are right-aligned. The output in the terminal is as follows:

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

The terminal output shows the command `cd "/config/workspace/" && javac prog2.java && java prog2` and the result of the program execution.

Question3

The screenshot shows a web-based IDE with the following content:

```

1  public static void main(String[] args) {
2      int n=10;
3      for (int i = 0; i < n; i++) {
4          for (int j = 0; j < n; j++) {
5              if (i==0 || j==0 || i==n-1 || j==n-1 || i+j<=(n-1)/2 || i-j>=(n-1)/2) {
6                  System.out.print("*");
7              } else {
8                  System.out.print(" ");
9              }
10             System.out.print("\n");
11         }
12     }
13 }

```

The output console shows the execution of the program, displaying a 5x5 grid of asterisks:

```

[Running] cd "/config/workspace/" && javac prog3.java && java prog3
*****
**  **
*   *
*   *
*   *
*****

```

The status bar at the bottom indicates the program exited with code=0 in 0.728 seconds.

Question4

Question5

