

LAPORAN TUGAS PEKAN 5
ALGORITMA DAN PEMROGAMAN
DI SUSUN OLEH :
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Kode program

```
package pekan5;
```

```
public class BelahKetupat_2511533017 {  
    public static void main(String[] args) {  
        int titik = 4;  
        int ukuran = 4;  
  
        String garisAtas = "#";  
        int panjang = titik * ukuran - 1;  
        for (int i = 0; i < panjang + 1; i++) {  
            garisAtas = garisAtas + "=";  
        }  
        garisAtas = garisAtas + "#";  
        System.out.println(garisAtas);  
  
        for (int i = 0; i < ukuran; i++) {  
            String baris = "|";  
            int spasi = (ukuran - 1) * 2;  
            for (int j = 0; j < spasi - 2 * i; j++) {  
                baris = baris + " ";  
            }  
  
            baris = baris + "<>";  
            int jumlahTitik = titik * i;  
            for (int j = 0; j < jumlahTitik; j++) {  
                baris = baris + ".";  
            }  
            baris = baris + "<>";  
        }  
    }  
}
```

```
for (int j = 0; j < spasi - 2 * i; j++) {
    baris = baris + " ";
}
baris = baris + "|";

System.out.println(baris);
}

for (int i = 0; i < ukuran; i++) {
    String baris = "|";
    int spasi = 0;
    for (int j = 0; j < spasi + 2 * i; j++) {
        baris = baris + " ";
    }

    baris = baris + "<>";
    int jumlahTitik = titik * (ukuran - (i + 1));
    for (int j = 0; j < jumlahTitik; j++) {
        baris = baris + ".";
    }
    baris = baris + "<>";

    for (int j = 0; j < spasi + 2 * i; j++) {
        baris = baris + " ";
    }
    baris = baris + "|";

    System.out.println(baris);
}
```

```

String garisBawah = "#";
for (int i = 0; i < panjang + 1; i++) {
    garisBawah = garisBawah + "=";
}
garisBawah = garisBawah + "#";
System.out.println(garisBawah);
}

```

Output yang dihasilkan

The screenshot shows the Eclipse IDE interface with the following details:

- Project Explorer:** Shows the project structure with files like Belajar, mantap, pekan1, pekan2, pekan3, pekan4, pekan5, Tugas3, TugasApro, and TugasPekan3.
- Code Editor:** Displays the Java code for generating a diamond shape. The code uses nested loops to print a diamond pattern of asterisks (*).
- Console Output:** Shows the terminal window displaying the printed diamond shape.
- Taskbar:** Shows various application icons and system status.

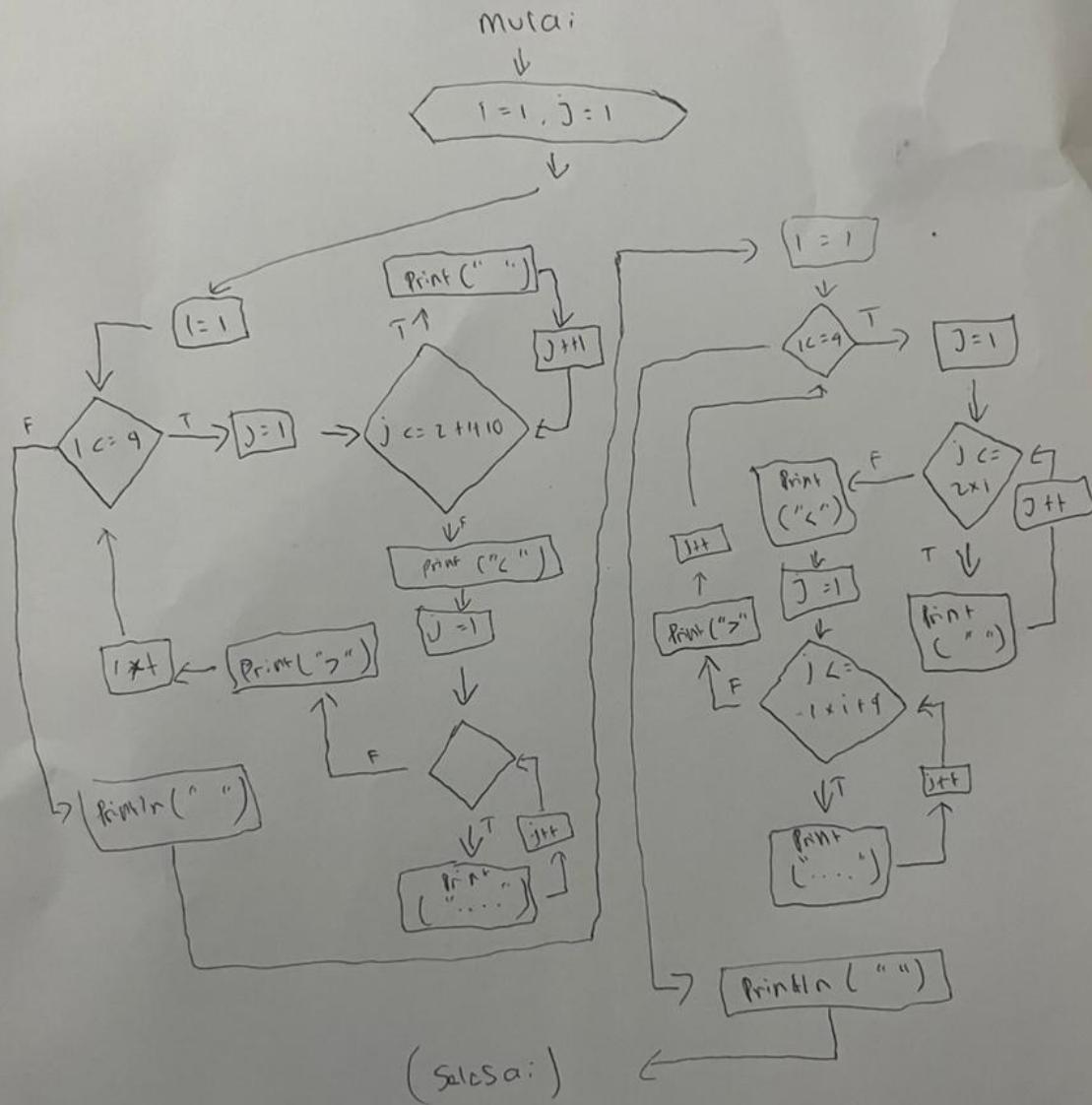
```

#*****
| * *
|   *
|     *
|   *
| * *
*****

```

Flowchart

Digo Tuandra
1511533017



Pseudocode

Judul

Program Mencetak Pola Belah Ketupat dengan Border

(program mencetak pola belah ketupat menggunakan karakter khusus dengan border atas dan bawah)

Deklarasi

1. Var titik, ukuran, panjang, i, j, k, spasi, jumlahTitik : Integer;
2. Var garisAtas, baris, garisBawah : String;

Pseudocode

1. titik \leftarrow 4
2. ukuran \leftarrow 4
3. garisAtas \leftarrow "#"
4. panjang \leftarrow titik * ukuran - 1
5. FOR i \leftarrow 0 TO panjang DO
6. garisAtas \leftarrow garisAtas + "="
7. END FOR
8. garisAtas \leftarrow garisAtas + "#"
9. PRINT garisAtas

10. FOR i \leftarrow 0 TO ukuran-1 DO
11. baris \leftarrow "|"
12. spasi \leftarrow (ukuran - 1) * 2
13. FOR j \leftarrow 0 TO spasi - 2*i - 1 DO
14. baris \leftarrow baris + " "
15. END FOR
16. baris \leftarrow baris + "<>"
17. jumlahTitik \leftarrow titik * i
18. FOR k \leftarrow 0 TO jumlahTitik - 1 DO
19. baris \leftarrow baris + "."
20. END FOR
21. baris \leftarrow baris + "<>"
22. FOR j \leftarrow 0 TO spasi - 2*i - 1 DO

```
23.    baris ← baris + " "
24. END FOR
25.    baris ← baris + "|"
26. PRINT baris
27. END FOR

28. FOR i ← 0 TO ukuran-1 DO
29.    baris ← "|"
30.    spasi ← 0
31.    FOR j ← 0 TO 2*i - 1 DO
32.       baris ← baris + " "
33.    END FOR
34.    baris ← baris + "<>"
35.    jumlahTitik ← titik * (ukuran - i - 1)
36.    FOR k ← 0 TO jumlahTitik - 1 DO
37.       baris ← baris + "."
38.    END FOR
39.    baris ← baris + "<>"
40.    FOR j ← 0 TO 2*i - 1 DO
41.       baris ← baris + " "
42.    END FOR
43.    baris ← baris + "|"
44. PRINT baris
45. END FOR

46. garisBawah ← "#"
47. FOR i ← 0 TO panjang DO
48.    garisBawah ← garisBawah + "="
49. END FOR
50. garisBawah ← garisBawah + "#"
51. PRINT garisBawah
```