

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. The main editor displays the following Java code:

```

1 package TugasAlproPekan3;
2
3 public class BelahKetupat_2511533017 {
4
5     public static void main(String[] args) {
6         int titik = 4;
7         int ukuran = 4;
8
9         String garisAtas = "O";
10        int panjang = titik * ukuran - 1;
11        for (int i = 0; i < panjang + 1; i++) {
12            garisAtas = garisAtas + " ";
13        }
14        garisAtas = garisAtas + "O";
15        System.out.println(garisAtas);
16
17        for (int i = 0; i < ukuran; i++) {
18            String baris = " ";
19            int spasi = (ukuran - 1) * 2;
20            for (int j = 0; j < spasi - 2 * i; j++) {
21                baris = baris + " ";
22            }
23            baris = baris + "\n";
24            int jumlahTitik = titik * i;
25

```

The Console window at the bottom shows the output of the program, which is a diamond shape made of 'O' characters:

```

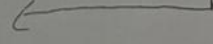
#####
O
O.....O
O.....O
O.....O
O.....O
O.....O
O.....O
#####

```

The status bar at the bottom indicates the file is terminated and the IDE is running on a Windows 10 system.

Flowchart

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

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

```