

Pseudocode :

PROGRAM TugasAlproPekan2

DEKLARASI:

inisial1, inisial2, inisial3, inisial4, inisial5 : char

nim : long

jurusan1 ... jurusan11 : char

kelasif : char

A, B, C, D : integer

nilai\_agama, nilai\_mtk, nilai\_kimia, nilai\_oarsikom, nilai\_pancasila : float

rata\_rata : float

Aktif : boolean

ALGORITMA:

1. Isi variabel inisial nama = 'R', 'a', 'z', 'i', 'f' (per huruf char)

2. Isi nim = 2511532028L (L untuk tipe data long)

3. Isi jurusan = "Informatika" (per huruf char)

4. Isi kelasif = 'B'

5. Tentukan batas nilai:

A = 70, B = 50, C = 30, D = 0

6. Isi nilai mata kuliah:

nilai\_agama = 70.1

nilai\_mtk = 60.6

nilai\_kimia = 80.3

nilai\_oarsikom = 67.7

nilai\_pancasila = 58.8

7. Hitung rata\_rata = (nilai\_agama + nilai\_mtk + nilai\_kimia + nilai\_oarsikom + nilai\_pancasila) / 5

8. Tampilkan judul "====Data Nilai Mahasiswa Semester 1===="

9. Tampilkan identitas mahasiswa:

Nama = gabungan inisial1..5

Nim

Fakultas = "Teknologi Informasi"

Jurusan = gabungan jurusan1..11

Kelas = kelasif

10. Cek status mahasiswa:

Jika Aktif = true → tampilkan "Aktif"

Jika tidak → tampilkan "Tidak Aktif"

11. Tampilkan nilai mahasiswa per mata kuliah:

Untuk setiap nilai:

Jika nilai  $\geq$  A → tampilkan (A)

Else jika nilai  $\geq$  B → tampilkan (B)

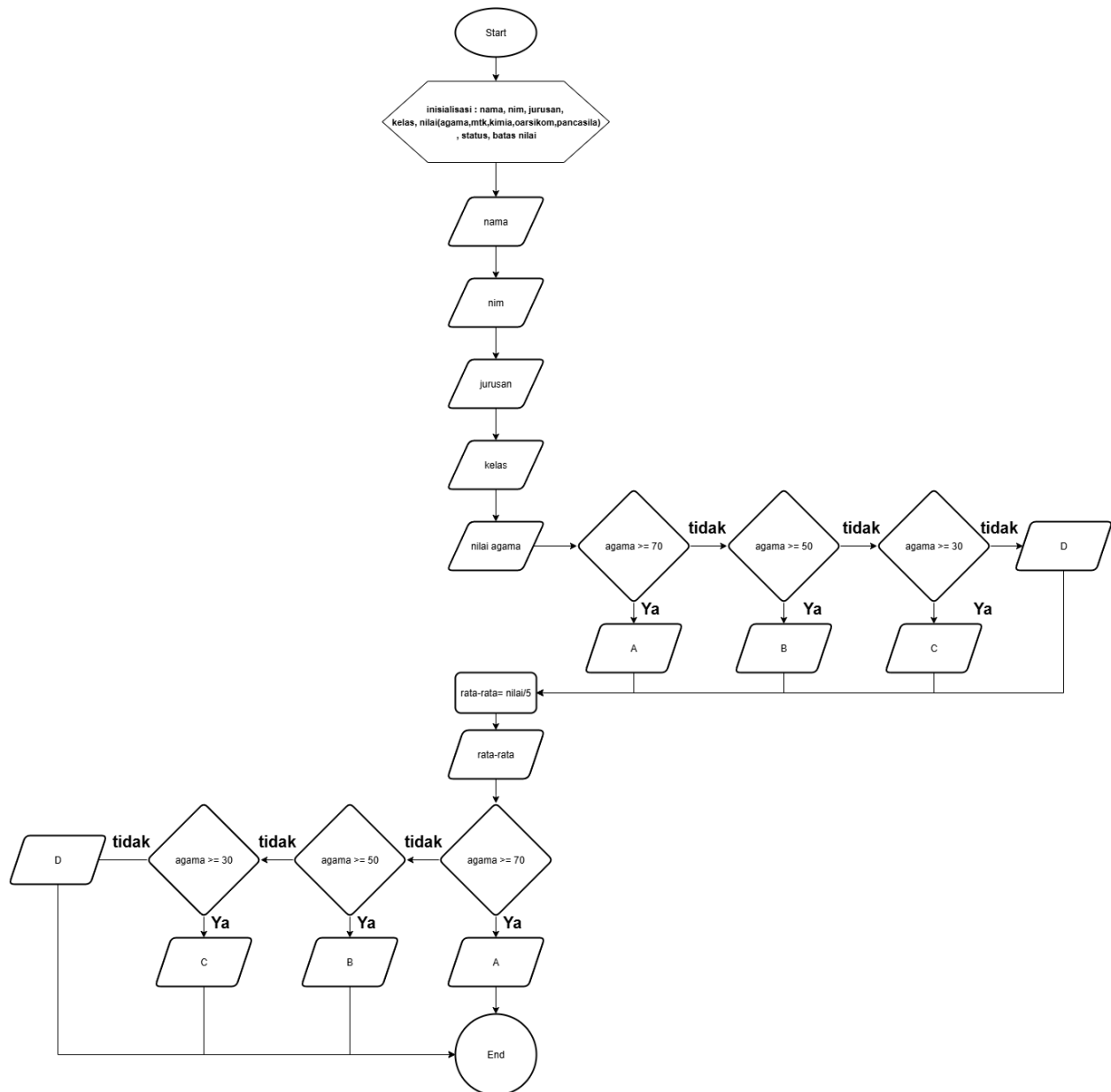
Else jika nilai  $\geq$  C → tampilkan (C)

Else jika nilai  $\geq$  D → tampilkan (D)

12. Tampilkan rata-rata beserta predikat huruf dengan logika yang sama.

13. Selesai.

Flowchart :



Kode Program :

```

1 package tester;
2
3 public class TugasAlproPekan2 {
4
5     public static void main(String[] args) {
6         char inisial1 = 'R' ;
7         char inisial2 = 'a' ;
8         char inisial3 = 'z' ;
9         char inisial4 = 'i' ;
10        char inisial5 = 'f' ;
11        long nim = 2511532028L;
12        char jurusan1 = 'I', jurusan2 = 'n', jurusan3 = 'f', jurusan4 = 'o', jurusan5 = 'n', jurusan6 = 'm' ;
13        char jurusan7 = 'a', jurusan8 = 't', jurusan9 = 'i', jurusan10 = 'k', jurusan11 = 'a' ;
14        char kelasif = 'B' ;
15        int A = 70 ;
16        int B = 50;
17        int C = 30;
18        int D = 0;
19        float nilai_agama = 70.1f, nilai_mtk = 60.6f, nilai_kimia = 80.3f, nilai_oarsikom = 67.7f, nilai_pancasila = 58.8f ;
20        float rata_rata ;
21        boolean Aktif = true;
22
23
24        rata_rata = (nilai_agama + nilai_mtk + nilai_kimia + nilai_oarsikom + nilai_pancasila)/5 ;
25        System.out.println("====Data Nilai Mahasiswa Semester 1====");
26        System.out.print("Nama Mahasiswa      : " + inisial1 + inisial2 + inisial3 + inisial4 + inisial5);
27        System.out.println();
28        System.out.println("Nim          : " + nim);
29        System.out.print("Fakultas      : ");
30        System.out.println("Teknologi Informasi");
31        System.out.print("Jurusan        : " + jurusan1 + jurusan2 + jurusan3 +
32            jurusan4 + jurusan5 + jurusan6 + jurusan7 + jurusan8 +
33            jurusan9 + jurusan10 + jurusan11);
34        System.out.println("Kelas        : " + kelasif);
35        System.out.print("Status Mahasiswa : ");
36        if (Aktif == true) {
37            System.out.println("Aktif");
38        } else {
39            System.out.println("Tidak Aktif");
40        }
41
42        System.out.println("Nilai Mahasiswa : ");
43        System.out.print("agama      = " + nilai_agama);
44        if (nilai_agama >= A == true) {
45            System.out.println(" (A)");
46        } else if (nilai_agama >= B == true) {
47            System.out.println(" (B)");
48        } else if (nilai_agama >= C == true) {
49            System.out.println(" (C)");
50        } else if (nilai_agama >= D == true) {
51            System.out.println(" (D)");
52        }
53        System.out.print("Matematika      = " + nilai_mtk);
54        if (nilai_mtk >= A == true) {
55            System.out.println(" (A)");
56        } else if (nilai_mtk >= B == true) {
57            System.out.println(" (B)");
58        } else if (nilai_mtk >= C == true) {
59            System.out.println(" (C)");
60        } else if (nilai_mtk >= D == true) {
61            System.out.println(" (D)");
62        }
63        System.out.print("Kimia          = " + nilai_kimia);
64        if (nilai_kimia >= A == true) {
65            System.out.println(" (A)");
66        } else if (nilai_kimia >= B == true) {
67            System.out.println(" (B)");
68        } else if (nilai_kimia >= C == true) {
69            System.out.println(" (C)");
70        } else if (nilai_kimia >= D == true) {
71            System.out.println(" (D)");

```

```

72     }
73     System.out.print("Organisasi & Komputer = " + nilai_oarsikom);
74     if (nilai_oarsikom >= A == true) {
75         System.out.println(" (A)");
76     } else if (nilai_oarsikom >= B == true) {
77         System.out.println(" (B)");
78     } else if (nilai_oarsikom >= C == true) {
79         System.out.println(" (C)");
80     } else if (nilai_oarsikom >= D == true) {
81         System.out.println(" (D)");
82     }
83     System.out.print("Pancasila = " + nilai_pancasila);
84     if (nilai_pancasila >= A == true) {
85         System.out.println(" (A)");
86     } else if (nilai_pancasila >= B == true) {
87         System.out.println(" (B)");
88     } else if (nilai_pancasila >= C == true) {
89         System.out.println(" (C)");
90     } else if (nilai_pancasila >= D == true) {
91         System.out.println(" (D)");
92     }
93     System.out.print("Rata-Rata : " + rata_rata);
94     if (rata_rata >= A == true) {
95         System.out.println(" (A)");
96     } else if (rata_rata >= B == true) {
97         System.out.println(" (B)");
98     } else if (rata_rata >= C == true) {
99         System.out.println(" (C)");
100    } else if (rata_rata >= D == true) {
101        System.out.println(" (D)");
102    }
103    //System.out.println("\033[1mLulus\033[0m");
104
105 }
106 }

```

Hasil :

```

=====Data Nilai Mahasiswa Semester 1=====
Nama Mahasiswa   : Razif
Nim              : 2511532028
Fakultas         : Teknologi Informasi
Jurusan          : Informatika
Kelas           : B
Status Mahasiswa : Aktif
Nilai Mahasiswa  :
agama            = 70.1 (A)
Matematika       = 60.6 (B)
Kimia            = 80.3 (A)
Organisasi & Komputer = 67.7 (B)
Pancasila        = 58.8 (B)
Rata-Rata        : 67.5 (B)

```

