

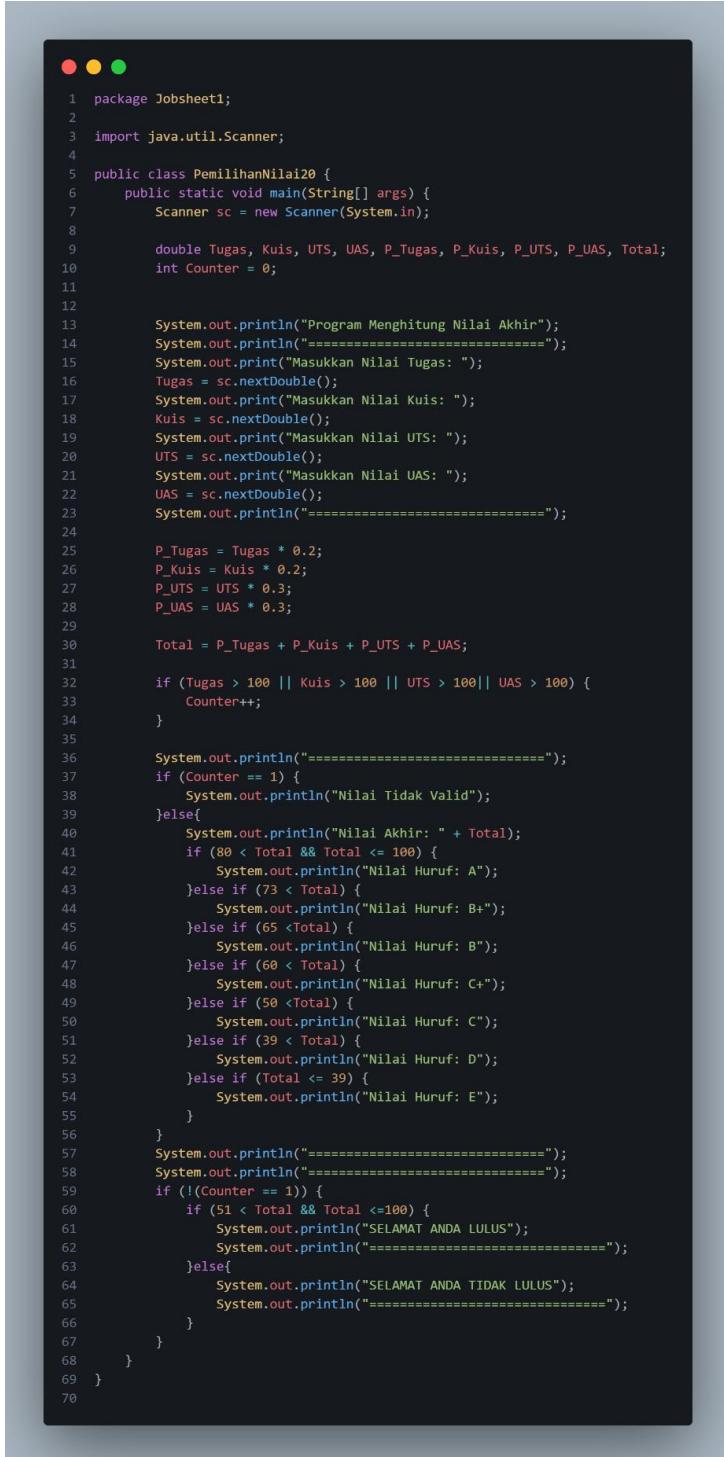
Jobsheet 1

Nama: Muhammad Akmal Dwiansyah Putra

Kelas/Absen: 1G_TI/20

NIM: 254107020110

1. Pemilihan



```
1 package Jobsheet1;
2
3 import java.util.Scanner;
4
5 public class PemilihanNilai20 {
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8
9         double Tugas, Kuis, UTS, UAS, P_Tugas, P_Kuis, P_UTS, P_UAS, Total;
10        int Counter = 0;
11
12
13        System.out.println("Program Menghitung Nilai Akhir");
14        System.out.println("=====");
15        System.out.print("Masukkan Nilai Tugas: ");
16        Tugas = sc.nextDouble();
17        System.out.print("Masukkan Nilai Kuis: ");
18        Kuis = sc.nextDouble();
19        System.out.print("Masukkan Nilai UTS: ");
20        UTS = sc.nextDouble();
21        System.out.print("Masukkan Nilai UAS: ");
22        UAS = sc.nextDouble();
23        System.out.println("=====");
24
25        P_Tugas = Tugas * 0.2;
26        P_Kuis = Kuis * 0.2;
27        P_UTS = UTS * 0.3;
28        P_UAS = UAS * 0.3;
29
30        Total = P_Tugas + P_Kuis + P_UTS + P_UAS;
31
32        if (Tugas > 100 || Kuis > 100 || UTS > 100 || UAS > 100) {
33            Counter++;
34        }
35
36        System.out.println("=====");
37        if (Counter == 1) {
38            System.out.println("Nilai Tidak Valid");
39        }else{
40            System.out.println("Nilai Akhir: " + Total);
41            if (80 < Total && Total <= 100) {
42                System.out.println("Nilai Huruf: A+");
43            }else if (73 < Total) {
44                System.out.println("Nilai Huruf: B+");
45            }else if (65 < Total) {
46                System.out.println("Nilai Huruf: B");
47            }else if (60 < Total) {
48                System.out.println("Nilai Huruf: C+");
49            }else if (50 < Total) {
50                System.out.println("Nilai Huruf: C");
51            }else if (39 < Total) {
52                System.out.println("Nilai Huruf: D");
53            }else if (Total <= 39) {
54                System.out.println("Nilai Huruf: E");
55            }
56        }
57        System.out.println("=====");
58        System.out.println("=====");
59        if ((Counter == 1)) {
60            if (51 < Total && Total <=100) {
61                System.out.println("SELAMAT ANDA LULUS");
62                System.out.println("=====");
63            }else{
64                System.out.println("SELAMAT ANDA TIDAK LULUS");
65                System.out.println("=====");
66            }
67        }
68    }
69 }
70 }
```

HASIL PROGRAM

```
Program Menghitung Nilai Akhir
=====
Masukkan Nilai Tugas: 90
Masukkan Nilai Kuis: 60
Masukkan Nilai UTS: 140
Masukkan Nilai UAS: 90
=====
Nilai Tidak Valid
=====

Program Menghitung Nilai Akhir
=====
Masukkan Nilai Tugas: 90
Masukkan Nilai Kuis: 80
Masukkan Nilai UTS: 50
Masukkan Nilai UAS: 65
=====
Nilai Akhir: 68.5
Nilai Huruf: B
=====
SELAMAT ANDA LULUS
```

2. Perulangan



```
1 package Jobsheet1;
2
3 import java.util.Scanner;
4
5 public class PerulanganNIM20 {
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8
9         double Nim, AngkaNim;
10
11         System.out.print("Masukkan NIM Anda: ");
12         Nim = sc.nextDouble();
13
14         AngkaNim = Nim % 100;
15
16         if (AngkaNim < 10) {
17             AngkaNim += 10;
18         }
19
20         for (int i = 1; i <= AngkaNim; i++) {
21
22             if(i == 10 || i == 15){
23                 continue;
24             }else if (i % 3 == 0) {
25                 System.out.print("#");
26             }else if (i % 2 == 1) {
27                 System.out.print("*");
28             }else{
29                 System.out.print(i);
30             }
31             System.out.print(" ");
32         }
33     }
34 }
```

HASIL PROGRAM

```
Masukkan NIM Anda: 254107020110  
* 2 # 4 * # * 8 #
```

3. Array

The screenshot shows a Java code editor with a dark theme. The code is a program named 'Jobsheet1' that reads student data from standard input. It uses three arrays: 'ArrayHuruf' (String[8][2]), 'ArrayAngka' (double[8][3]), and 'TotalHitung' (double[8]). The program prompts for student names and their marks, then converts letter grades to numerical values based on a scale. It calculates the total score and average grade. The code includes error handling for invalid inputs.

```
1 package Jobsheet1;
2
3 import java.util.Scanner;
4
5 public class ArrayNilai20 {
6     public static void main(String[] args) {
7
8         Scanner sc = new Scanner(System.in);
9
10        // [8][1] Untuk MK dan [8][2] Untuk Nilai Huruf
11        String[][] ArrayHuruf = new String[8][2];
12        // [8][1] Untuk Nilai Angka, [8][2] Untuk Bobot SKS, [8][3] Untuk Nilai Setara
13        double[][] ArrayAngka = new double[8][3];
14        double[] TotalHitung = new double[8];
15
16        double TotalIP = 0, TotalSKS = 0;
17        System.out.println("*****");
18        for (int i = 0; i < TotalHitung.length; i++) {
19            System.out.print("Masukkan Mata Pelajaran ke-" + (i+1) + ": ");
20            ArrayHuruf[i][0] = sc.nextLine();
21            System.out.print("Input Bobot Nilai Mata Pelajaran: ");
22            ArrayAngka[i][1] = sc.nextDouble();
23            sc.nextLine();
24        }
25        System.out.println("*****");
26
27        for (int i = 0; i < TotalHitung.length; i++) {
28            System.out.print("Masukkan Nilai " + ArrayHuruf[i][0] + ": ");
29            while (true) {
30                ArrayAngka[i][0] = sc.nextDouble();
31                if (0 < ArrayAngka[i][0] && ArrayAngka[i][0] <= 100 ) {
32                    break;
33                }else{
34                    System.out.println("Nilai Tidak Sesuai, Mohon Coba Kembali");
35                    continue;
36                }
37            }
38        }
39
40        for (int i = 0; i < TotalHitung.length; i++) {
41            if (80 < ArrayAngka[i][0] && ArrayAngka[i][0] <= 100) {
42                ArrayHuruf[i][1] = "A";
43                ArrayAngka[i][2] = 4;
44            }else if (73 < ArrayAngka[i][0]) {
45                ArrayHuruf[i][1] = "B+";
46                ArrayAngka[i][2] = 3.5;
47            }else if (65 < ArrayAngka[i][0]) {
48                ArrayHuruf[i][1] = "B";
49                ArrayAngka[i][2] = 3;
50            }else if (60 < ArrayAngka[i][0]) {
51                ArrayHuruf[i][1] = "C+";
52                ArrayAngka[i][2] = 2.5;
53            }else if (50 < ArrayAngka[i][0]) {
54                ArrayHuruf[i][1] = "C";
55                ArrayAngka[i][2] = 2;
56            }else if (39 < ArrayAngka[i][0]) {
57                ArrayHuruf[i][1] = "D";
58                ArrayAngka[i][2] = 1;
59            }else if (ArrayAngka[i][0] <= 39) {
60                ArrayHuruf[i][1] = "E";
61                ArrayAngka[i][2] = 0;
62            }
63        }
64
65        for (int i = 0; i < TotalHitung.length; i++) {
66            TotalHitung[i] = ArrayAngka[i][1] * ArrayAngka[i][2];
67            TotalIP += TotalHitung[i];
68            TotalSKS += ArrayAngka[i][1];
69        }
70
71        System.out.println("Nilai hasil konversi");
72        System.out.println("*****");
73        System.out.println("NAMA KULIAH | NILAI ANGKA | NILAI HURUF | BOBOT NILAI");
74
75        for(int i = 0; i < TotalHitung.length; i++){
76            System.out.printf("%-4s | %-10.2f | %-11.2f | \n",
77                ArrayHuruf[i][0], ArrayAngka[i][0], ArrayHuruf[i][1], ArrayAngka[i][2]);
78        }
79
80        System.out.println("IP: " + (TotalIP / TotalSKS));
81
82    }
83 }
```

HASIL PROGRAM

Masukkan Mata Pelajaran ke-1: Pancasila
 Input Bobot Nilai Mata Pelajaran: 2
 Masukkan Mata Pelajaran ke-2: KTI
 Input Bobot Nilai Mata Pelajaran: 2
 Masukkan Mata Pelajaran ke-3: MatDas
 Input Bobot Nilai Mata Pelajaran: 4
 Masukkan Mata Pelajaran ke-4: B.Ing
 Input Bobot Nilai Mata Pelajaran: 3
 Masukkan Mata Pelajaran ke-5: Daspro
 Input Bobot Nilai Mata Pelajaran: 6
 Masukkan Mata Pelajaran ke-6: Praktikum Daspro
 Input Bobot Nilai Mata Pelajaran: 6
 Masukkan Mata Pelajaran ke-7: CTPS
 Input Bobot Nilai Mata Pelajaran: 2
 Masukkan Mata Pelajaran ke-8: K3
 Input Bobot Nilai Mata Pelajaran: 2

Masukkan Nilai Pancasila: 75
 Masukkan Nilai KTI: 85
 Masukkan Nilai MatDas: 85
 Masukkan Nilai B.Ing: 85
 Masukkan Nilai Daspro: 62
 Masukkan Nilai Praktikum Daspro: 62
 Masukkan Nilai CTPS: 70
 Masukkan Nilai K3: 85
 Nilai hasil konversi

MATA KULIAH NILAI ANGKA NILAI HURUF BOBOT NILAI				
Pancasila	75.00	B+		3.50
KTI	85.00	A		4.00
MatDas	85.00	A		4.00
B.Ing	85.00	A		4.00
Daspro	62.00	C+		2.50
Praktikum Daspro	62.00	C+		2.50
CTPS	70.00	B		3.00
K3	85.00	A		4.00

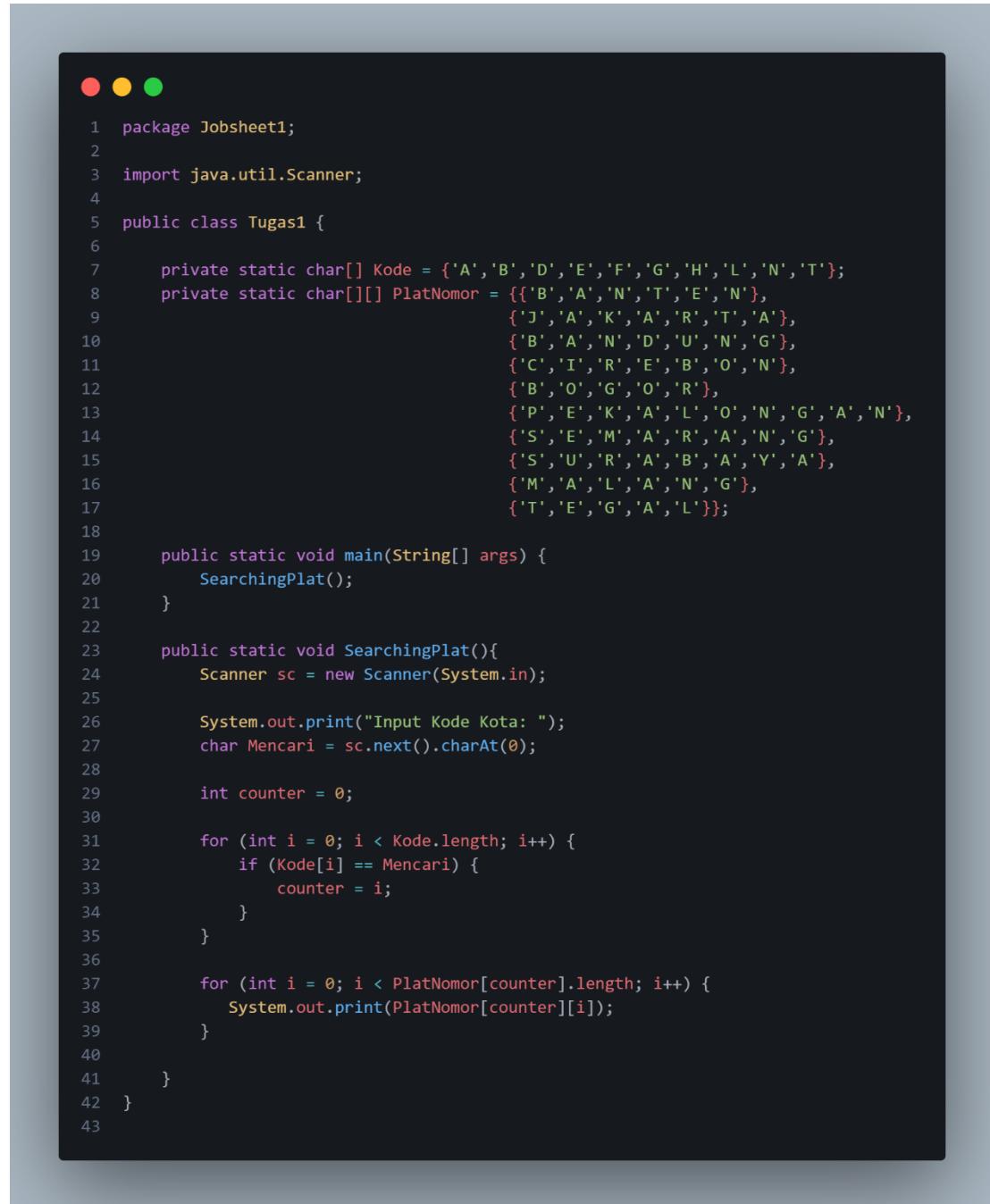
4. Fungsi

```
1 package Jobsheet1;
2
3 public class FungsiCabang20 {
4
5     private static double[][] Stock = {{10, 5, 15, 7},
6                                         {6, 11, 9, 12},
7                                         {2, 10, 10, 5},
8                                         {5, 7, 12, 9}};
9     private static double[] Harga = {75000, 50000, 60000, 10000};
10
11    public static void main(String[] args) {
12        MenghitungHarga();
13        Status();
14    }
15
16    public static void MenghitungHarga(){
17
18        System.out.println("== PENDAPATAN SETIAL CABANG ==");
19
20        int[] Total = new int[4];
21        for (int i = 0; i < Stock.length; i++) {
22            for (int j = 0; j < Stock[i].length; j++) {
23                Total[i] += Stock[i][j] * Harga[j];
24            }
25        }
26
27        for (int i = 0; i < Total.length; i++) {
28            System.out.println("Royal Garden " + (i+1) + ": Rp. " + Total[i]);
29        }
30        System.out.println("=====");
31        System.out.println("");
32    }
33
34    private static void Status(){
35        System.out.println("== STATUS EVALUASI ==");
36
37        int[] Total = new int[4];
38        for (int i = 0; i < Stock.length; i++) {
39            for (int j = 0; j < Stock[i].length; j++) {
40                Total[i] += Stock[i][j] * Harga[j];
41            }
42        }
43
44        for (int i = 0; i < Total.length; i++) {
45            if (Total[i] > 1500000 && Total[i] <= 1500000) {
46                System.out.println("Royal Garden " + (i+1) + ": Rp. " + Total[i] + " | Status: Sangat Baik");
47            }else{
48                System.out.println("Royal Garden " + (i+1) + ": Rp. " + Total[i] + " | Status: Perlu Evaluasi");
49            }
50        }
51        System.out.println("=====");
52    }
53 }
```

HASIL PROGRAM

```
==== PENDAPATAN SETIAL CABANG ====
Royal Garden 1: Rp. 1970000
Royal Garden 2: Rp. 1660000
Royal Garden 3: Rp. 1300000
Royal Garden 4: Rp. 1535000
=====
==== STATUS EVALUASI ====
Royal Garden 1: Rp. 1970000 | Status: Perlu Evaluasi
Royal Garden 2: Rp. 1660000 | Status: Perlu Evaluasi
Royal Garden 3: Rp. 1300000 | Status: Perlu Evaluasi
Royal Garden 4: Rp. 1535000 | Status: Perlu Evaluasi
=====
```

- Tugas 1



```
1 package Jobsheet1;
2
3 import java.util.Scanner;
4
5 public class Tugas1 {
6
7     private static char[] Kode = {'A','B','D','E','F','G','H','L','N','T'};
8     private static char[][] PlatNomor = {{'B','A','N','T','E','N'},
9                                         {'J','A','K','A','R','T','A'},
10                                        {'B','A','N','D','U','N','G'},
11                                        {'C','I','R','E','B','O','N'},
12                                        {'B','O','G','O','R'},
13                                        {'P','E','K','A','L','O','N','G','A','N'},
14                                        {'S','E','M','A','R','A','N','G'},
15                                        {'S','U','R','A','B','A','Y','A'},
16                                        {'M','A','L','A','N','G'},
17                                        {'T','E','G','A','L'}};
18
19     public static void main(String[] args) {
20         SearchingPlat();
21     }
22
23     public static void SearchingPlat(){
24         Scanner sc = new Scanner(System.in);
25
26         System.out.print("Input Kode Kota: ");
27         char Mencari = sc.next().charAt(0);
28
29         int counter = 0;
30
31         for (int i = 0; i < Kode.length; i++) {
32             if (Kode[i] == Mencari) {
33                 counter = i;
34             }
35         }
36
37         for (int i = 0; i < PlatNomor[counter].length; i++) {
38             System.out.print(PlatNomor[counter][i]);
39         }
40
41     }
42 }
43 }
```

HASIL PROGRAM

Input Kode Kota: G
PEKALONGAN

- TUGAS 2



```
1 package Jobsheet1;
2
3 import java.util.Scanner;
4
5 public class Tugas2 {
6
7     public static void main(String[] args) {
8         Scanner sc = new Scanner(System.in);
9
10        System.out.print("Masukkan jumlah jadwal kuliah: ");
11        int n = sc.nextInt();
12        sc.nextLine();
13
14        String[][] jadwal = new String[n][4];
15
16        inputJadwal(jadwal, n, sc);
17
18        int pilihan;
19        do {
20            System.out.println("\n==== MENU JADWAL KULIAH ===");
21            System.out.println("1. Tampilkan seluruh jadwal (tabel)");
22            System.out.println("2. Tampilkan jadwal berdasarkan hari tertentu");
23            System.out.println("3. Tampilkan jadwal berdasarkan nama mata kuliah");
24            System.out.println("4. Keluar");
25            pilihan = sc.nextInt();
26            sc.nextLine();
27            sc.nextLine();
28
29            switch (pilihan) {
30                case 1:
31                    System.out.println("==== Seluruh Jadwal Kuliah ===");
32                    tampilkanJadwal(jadwal, n);
33                    break;
34                case 2:
35                    System.out.print("Masukkan hari yang dicari: ");
36                    String hari = sc.nextLine();
37                    tampilkanJadwalHari(jadwal, n, hari);
38                    break;
39                case 3:
40                    System.out.print("Masukkan nama mata kuliah ( bisa sebagian): ");
41                    String mk = sc.nextLine();
42                    tampilkanJadwalMataKuliah(jadwal, n, mk);
43                    break;
44                case 4:
45                    System.out.println("Program selesai.");
46                    break;
47                default:
48                    System.out.println("Pilihan tidak valid.");
49            }
50        } while (pilihan != 4);
51
52        sc.close();
53    }
54
55    static void inputJadwal(String[][] jadwal, int n, Scanner sc) {
56        for (int i = 0; i < n; i++) {
57            System.out.printf("---- Jadwal %d ---\n", i + 1);
58            System.out.print("Mata Kuliah: ");
59            jadwal[i][0] = sc.nextLine();
60            System.out.print("Ruang: ");
61            jadwal[i][1] = sc.nextLine();
62            System.out.print("Hari Kuliah: ");
63            jadwal[i][2] = sc.nextLine();
64            System.out.print("Jam Kuliah: ");
65            jadwal[i][3] = sc.nextLine();
66        }
67    }
68
69
70    static void tampilkanJadwal(String[][] jadwal, int n) {
71        System.out.printf("%-20s %-10s %-10s\n", "Mata Kuliah", "Ruang", "Hari", "Jam");
72        for (int i = 0; i < n; i++) {
73            System.out.printf("%-20s %-20s %-10s %-15s\n", jadwal[i][0], jadwal[i][1], jadwal[i][2], jadwal[i][3]);
74        }
75    }
76
77
78    static void tampilkanJadwalHari(String[][] jadwal, int n, String hari) {
79        System.out.printf("---- Jadwal Kuliah Hari %s ---\n", hari.trim());
80        System.out.printf("%-20s %-10s %-10s\n", "Mata Kuliah", "Ruang", "Hari", "Jam");
81        boolean ditemukan = false;
82        for (int i = 0; i < n; i++) {
83            if (jadwal[i][2].equalsIgnoreCase(hari.trim())) {
84                System.out.printf("%-20s %-20s %-10s %-15s\n", jadwal[i][0], jadwal[i][1], jadwal[i][2], jadwal[i][3]);
85                ditemukan = true;
86            }
87        }
88        if (!ditemukan) {
89            System.out.println("Tidak ada jadwal pada hari tersebut.");
90        }
91    }
92
93
94    static void tampilkanJadwalMataKuliah(String[][] jadwal, int n, String mk) {
95        System.out.printf("---- Jadwal Mata Kuliah yang mengandung: %s ---\n", mk.trim());
96        System.out.printf("%-20s %-10s %-10s\n", "Mata Kuliah", "Ruang", "Hari", "Jam");
97        boolean ditemukan = false;
98        for (int i = 0; i < n; i++) {
99            if (jadwal[i][0].toLowerCase().contains(mk.toLowerCase().trim())) {
100                System.out.printf("%-20s %-20s %-10s %-15s\n", jadwal[i][0], jadwal[i][1], jadwal[i][2], jadwal[i][3]);
101                ditemukan = true;
102            }
103        }
104        if (!ditemukan) {
105            System.out.println("Tidak ada jadwal dengan nama tersebut.");
106        }
107    }
108
109
110 }
```

HASIL PROGRAM

```
Masukkan jumlah jadwal kuliah: 5
=== Jadwal 1 ===
Nama Mata Kuliah: Daspro
Ruang: Ruang teori 2
Hari Kuliah: Senin
Jam Kuliah: 10.30
=== Jadwal 2 ===
Nama Mata Kuliah: Praktikum Daspro
Ruang: Ruang Praktikum 5
Hari Kuliah: Selasa
Jam Kuliah: 7.30
=== Jadwal 3 ===
Nama Mata Kuliah: KTI
Ruang: Ruang 8
Hari Kuliah: Jumat
Jam Kuliah: 13.00
=== Jadwal 4 ===
Nama Mata Kuliah: CTPS
Ruang: Ruang 5
Hari Kuliah: Rabu
Jam Kuliah: 14.00
=== Jadwal 5 ===
Nama Mata Kuliah: K3
Ruang: Ruang 7
Hari Kuliah: Kamis
Jam Kuliah: 10.30

== MENU JADWAL KULIAH ==
1. Tampilkan seluruh jadwal (tabel)
2. Tampilkan jadwal berdasarkan hari tertentu
3. Tampilkan jadwal berdasarkan nama mata kuliah
4. Keluar
Pilih menu (1-4): 1

== Seluruh Jadwal Kuliah ==
Mata Kuliah      Ruang      Hari      Jam
Daspro           Ruang teori 2   Senin    10.30
Praktikum Daspro Ruang Praktikum 5 Selasa   7.30
KTI              Ruang 8       Jumat    13.00
CTPS             Ruang 5       Rabu    14.00
K3               Ruang 7       Kamis   10.30

== MENU JADWAL KULIAH ==
1. Tampilkan seluruh jadwal (tabel)
2. Tampilkan jadwal berdasarkan hari tertentu
3. Tampilkan jadwal berdasarkan nama mata kuliah
4. Keluar
Pilih menu (1-4): 2
Masukkan hari yang dicari: kamis
=== Jadwal Kuliah Hari kamis ==
Mata Kuliah      Ruang      Hari      Jam
K3               Ruang 7       Kamis   10.30

== MENU JADWAL KULIAH ==
1. Tampilkan seluruh jadwal (tabel)
2. Tampilkan jadwal berdasarkan hari tertentu
3. Tampilkan jadwal berdasarkan nama mata kuliah
4. Keluar
Pilih menu (1-4): 3
Masukkan nama mata kuliah (bisa sebagian): Ctps
=== Jadwal Mata Kuliah yang mengandung: Ctps ==
Mata Kuliah      Ruang      Hari      Jam
CTPS             Ruang 5       Rabu    14.00
```