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**LAPORAN JOBSHEET 1**

## 1. Pemilihan

Kode Program:

```
package Jobsheet1;

import java.util.Scanner;
public class Pemilihan06 {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int nilaiTgs, nilaiKuis, nilaiUts, nilaiUas;

        System.out.println("\nProgram Menghitung Nilai Akhir");
        System.out.println("==============================");

        System.out.print("Masukkan Nilai Tugas \t: ");
        nilaiTgs = sc.nextInt();
        System.out.print("Masukkan Nilai Kuis \t: ");
        nilaiKuis = sc.nextInt();
        System.out.print("Masukkan Nilai UTS \t: ");
        nilaiUts = sc.nextInt();
        System.out.print("Masukkan Nilai UAS \t: ");
        nilaiUas = sc.nextInt();

        System.out.println("==============================");
        System.out.println("==============================");

        if (nilaiTgs < 0 || nilaiTgs > 100 || nilaiKuis < 0 || nilaiKuis > 100
|| nilaiUts < 0 || nilaiUts > 100 || nilaiUas < 0 || nilaiUas > 100 ) {
            System.out.println("Nilai Tidak Valid");
            System.out.println("==============================");
            System.out.println("==============================");
            return;
        }

        double nilaiAkhir;
        String status;
```

```
        String nilaiHuruf = "";

        nilaiAkhir = (nilaiTgs * 0.2) + (nilaiKuis * 0.2) + (nilaiUts * 0.3) +
(nilaiUas * 0.3);

        if (nilaiAkhir > 80 && nilaiAkhir <= 100) {
            nilaiHuruf = "A";
        } else if (nilaiAkhir > 73 && nilaiAkhir <= 80) {
            nilaiHuruf = "B+";
        } else if (nilaiAkhir > 65 && nilaiAkhir <= 73) {
            nilaiHuruf = "B";
        } else if (nilaiAkhir > 60 && nilaiAkhir <= 65) {
            nilaiHuruf = "C+";
        } else if (nilaiAkhir > 50 && nilaiAkhir <= 60) {
            nilaiHuruf = "C";
        } else if (nilaiAkhir > 39 && nilaiAkhir <= 50) {
            nilaiHuruf = "D";
        } else if (nilaiAkhir <= 39){
            nilaiHuruf = "E";
        } else {
            System.out.println("nilai tidak valid");
        }

        System.out.println("Nilai akhir: " + nilaiAkhir);
        System.out.println("Nilai huruf: " + nilaiHuruf);

        System.out.println("==============================");
        System.out.println("==============================");

        if (nilaiAkhir >= 51) {
            status = "SELAMAT ANDA LULUS";
        } else {
            status = "ANDA TIDAK LULUS";
        }

        System.out.println(status);
    }

}
```

Hasil Running:

```
Program Menghitung Nilai Akhir
==============================
Masukkan Nilai Tugas    : 85
Masukkan Nilai Kuis     : 90
Masukkan Nilai UTS      : 120
Masukkan Nilai UAS      : 70
==============================
==============================
Nilai Tidak Valid
==============================
==============================
```

```
Program Menghitung Nilai Akhir
==============================
Masukkan Nilai Tugas    : 90
Masukkan Nilai Kuis     : 40
Masukkan Nilai UTS      : 75
Masukkan Nilai UAS      : 85
==============================
==============================
Nilai akhir: 74.0
Nilai huruf: B+
==============================
==============================
SELAMAT ANDA LULUS
```

## 2. Perulangan

Kode Program:

```java
package Jobsheet1;

import java.util.Scanner;
public class Perulangan06 {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
```

```
        System.out.print("Masukkan NIM: ");
        String nim = sc.nextLine();

        int n = Integer.parseInt(nim.substring(nim.length() - 2));

        if(n < 10) {
            n += 10;
        }

        System.out.println("n = " + n);
        System.out.print("Output: ");

        for (int i = 1; i <= n; i++) {
            if (i == 10 || i == 15) {
                continue;
            }

            if (i % 3 == 0) {
                System.out.print("# ");
            }
            else if (i % 2 == 0) {
             System.out.print(i + " ");
            }
            else {
            System.out.print("* ");
            }
        }

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

Hasil Running:

```
Masukkan NIM: 2541720102
n = 12
Output: * 2 # 4 * # * 8 # * #
```

```
Masukkan NIM: 2541720120
n = 20
Output: * 2 # 4 * # * 8 # * # * 14 16 * # * 20
```

### 3. Array

Kode Program:

```
package Jobsheet1;

import java.util.Scanner;
public class Array06 {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.println("==============================");
        System.out.println("Program Menghitung IP Semester");
        System.out.println("==============================");

        System.out.print("Masukkan jumlah mata kuliah: ");
        int jumlahMK = sc.nextInt();
        sc.nextLine();

        int[] sks = new int[jumlahMK];
        String[] mk = new String[jumlahMK];
        String[] nilaiHuruf = new String[jumlahMK];
        double[] nilaiAngka = new double[jumlahMK];
        double[] nilaiSetara = new double[jumlahMK];

        double totalNilai = 0;
        double totalSks = 0;

        for (int i = 0; i < jumlahMK; i++) {
            System.out.println("\nMata Kuliah ke- " + (i + 1));

            System.out.print("Nama MK\t\t: ");
            mk[i] = sc.nextLine();

            System.out.print("Jumlah SKS\t: ");
            sks[i] = sc.nextInt();

            System.out.print("Nilai Angka\t: ");
            nilaiAngka[i] = sc.nextDouble();
            sc.nextLine();

            if (nilaiAngka[i] >= 80) {
                nilaiHuruf[i] = "A";
                nilaiSetara[i] = 4.0;
            } else if (nilaiAngka[i] >= 75) {
                nilaiHuruf[i] = "B+";
                nilaiSetara[i] = 3.5;
            } else if (nilaiAngka[i] >= 70) {
```

```
                nilaiHuruf[i] = "B";
                nilaiSetara[i] = 3.0;
            } else if (nilaiAngka[i] >= 65) {
                nilaiHuruf[i] = "C+";
                nilaiSetara[i] = 2.5;
            } else if (nilaiAngka[i] >= 60) {
                nilaiHuruf[i] = "C";
                nilaiSetara[i] = 2.0;
            } else if (nilaiAngka[i] >= 50) {
                nilaiHuruf[i] = "D";
                nilaiSetara[i] = 1.0;
            } else {
                nilaiHuruf[i] = "E";
                nilaiSetara[i] = 0.0;
            }

            totalNilai += nilaiSetara[i] * sks[i];
            totalSks += sks[i];
        }

        double ip = totalNilai / totalSks;

        System.out.println("\n==============================");
        System.out.println("hasil Konversi Nilai");
        System.out.println("==============================");

        System.out.printf("%-40s %-12s %-12s %-12s\n",
                "MK", "Nilai Angka", "Nilai Huruf", "Bobot Nilai");

        for (int i = 0; i < jumlahMK; i++) {
            System.out.printf("%-40s %-12.2f %-12s %-12.2f\n",
                    mk[i], nilaiAngka[i], nilaiHuruf[i], nilaiSetara[i]);
        }

        System.out.println("==============================");
        System.out.printf("IP : %.2f\n", ip);
    }

}
```

Hasil Running:

```
==============================
Program Menghitung IP Semester
==============================
Masukkan jumlah mata kuliah: 3

Mata Kuliah ke- 1
Nama MK         : Pancasila
Jumlah SKS      : 2
Nilai Angka     : 80

Mata Kuliah ke- 2
Nama MK         : Matematika Dasar
Jumlah SKS      : 3
Nilai Angka     : 90

Mata Kuliah ke- 3
Nama MK         : Dasar Pemrograman
Jumlah SKS      : 3
Nilai Angka     : 89

==============================
hasil Konversi Nilai
==============================
MK                                  Nilai Angka  Nilai Huruf  Bobot Nilai
Pancasila                           80,00        A            4,00
Matematika Dasar                    90,00        A            4,00
Dasar Pemrograman                   89,00        A            4,00
==============================
IP : 4,00
```

## 4. Fungsi

Kode Program:

```java
package Jobsheet1;

public class Fungsi06 {

    static int[][] stok = {
        {10, 5, 15, 7},
        {6, 11, 9, 12},
        {2, 10, 10, 5},
        {5, 7, 12, 9}
    };
```

```java
    static int[] harga = {75000, 50000, 60000, 10000};

    static String[] namaBunga = {"Aglonema", "Keladi", "Alocasia", "Mawar"};

    public static void main(String[] args) {
        tampilTabelStok();
        System.out.println();

        tampilPendapatanDanStatus();
    }

    static void tampilTabelStok() {
        System.out.println("TABEL STOK BUNGA");
        System.out.println("-------------------------------------------------
--------");
        System.out.printf("%-15s %-10s %-10s %-10s %-10s\n",
                "Cabang", "Aglonema", "Keladi", "Alocasia", "Mawar");

        for (int i = 0; i < stok.length; i++) {
            System.out.printf("RoyalGarden %-3d", (i + 1));
            for (int j = 0; j < stok[i].length; j++) {
                System.out.printf(" %-10d", stok[i][j]);
            }
            System.out.println();
        }
        System.out.println("-------------------------------------------------
--------");
    }

    static void tampilPendapatanDanStatus() {
        System.out.println("=====PENDAPATAN SETIAP CABANG ROYAL GARDEN=====");

        for (int i = 0; i < stok.length; i++) {
            int total = hitungPendapatan(i);

            System.out.println("RoyalGarden " + (i + 1));
            System.out.println("Pendapatan : Rp " + total);

            if (total > 1500000) {
                System.out.println("Status     : Sangat Baik");
            } else {
                System.out.println("Status     : Perlu Evaluasi");
            }
            System.out.println();
        }
    }

    static int hitungPendapatan(int cabang) {
```

```
        int total = 0;
        for (int j = 0; j < stok[cabang].length; j++) {
            total += stok[cabang][j] * harga[j];
        }
        return total;
    }
}
```

Hasil Running:

```
TABEL STOK BUNGA
-------------------------------------------------------------
Cabang          Aglonema    Keladi      Alocasia    Mawar
RoyalGarden 1   10          5           15          7
RoyalGarden 2   6           11          9           12
RoyalGarden 3   2           10          10          5
RoyalGarden 4   5           7           12          9
-------------------------------------------------------------

=====PENDAPATAN SETIAP CABANG ROYAL GARDEN=====
RoyalGarden 1
Pendapatan : Rp 1970000
Status     : Sangat Baik

RoyalGarden 2
Pendapatan : Rp 1660000
Status     : Sangat Baik

RoyalGarden 3
Pendapatan : Rp 1300000
Status     : Perlu Evaluasi

RoyalGarden 4
Pendapatan : Rp 1535000
Status     : Sangat Baik
```

## 5. Tugas 1

Kode Program:

```
package Jobsheet1;
```

```java
import java.util.Scanner;
public class Tugas1 {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        char[] kode = {'A','B','D','E','F','G','H','L','N','T'};
        char[][] kota = {
                {'B','A','N','T','E','N'},
                {'J','A','K','A','R','T','A'},
                {'B','A','N','D','U','N','G'},
                {'C','I','R','E','B','O','N'},
                {'B','O','G','O','R'},
                {'P','E','K','A','L','O','N','G','A','N'},
                {'S','E','M','A','R','A','N','G'},
                {'S','U','R','A','B','A','Y','A'},
                {'M','A','L','A','N','G'},
                {'T','E','G','A','L'}
        };

        System.out.print("Masukkan kode plat: ");
        char input = sc.next().toUpperCase().charAt(0);

        boolean ditemukan = false;

        for (int i = 0; i < kode.length; i++) {
            if (input == kode[i]) {
                System.out.print("Kota: ");

                for (int j = 0; j < kota[i].length; j++) {
                    System.out.print(kota[i][j]);
                }
                System.out.println();
                ditemukan = true;
                break;
            }
        }

        if (!ditemukan) {
            System.out.println("Kode tidak ditemukan");
        }
    }
}
```

Hasil Running:

```
Masukkan kode plat: B
Kota: JAKARTA
```

## 6. Tugas 2

Kode Program:

```
package Jobsheet1;

import java.util.Scanner;
public class Tugas2 {

    static Scanner sc = new Scanner(System.in);

    static void inputJadwal(String[][] jadwal, int n) {
        for (int i = 0; i < n; i++) {
            System.out.println("\nJadwal ke-" + (i+1));

            System.out.print("Nama Mata Kuliah : ");
            jadwal[i][0] = sc.nextLine();

            System.out.print("Ruang            : ");
            jadwal[i][1] = sc.nextLine();

            System.out.print("Hari             : ");
            jadwal[i][2] = sc.nextLine();

            System.out.print("Jam              : ");
            jadwal[i][3] = sc.nextLine();
        }
    }

    static void tampilSemua(String[][] jadwal, int n) {
        System.out.println("\n================= JADWAL KULIAH
=================");
        System.out.printf("%-25s %-20s %-10s %-15s\n",
                "Mata Kuliah", "Ruang", "Hari", "Jam");
        System.out.println("-----------------------------------------------------
------------------");

        for (int i = 0; i < n; i++) {
            System.out.printf("%-25s %-20s %-10s %-15s\n",
                    jadwal[i][0], jadwal[i][1], jadwal[i][2], jadwal[i][3]);
        }
    }

    static void cariHari(String[][] jadwal, int n) {
        System.out.print("\nMasukkan hari yang dicari: ");
        String cari = sc.nextLine();
        boolean ketemu = false;

        System.out.println("\nHasil pencarian hari " + cari + ":");
```

```
        System.out.printf("%-25s %-20s %-10s %-15s\n",
                "Mata Kuliah", "Ruang", "Hari", "Jam");
        System.out.println("----------------------------------------------------
------------------");

        for (int i = 0; i < n; i++) {
            if (jadwal[i][2].equalsIgnoreCase(cari)) {
                System.out.printf("%-25s %-20s %-10s %-15s\n",
                        jadwal[i][0], jadwal[i][1], jadwal[i][2],
jadwal[i][3]);
                ketemu = true;
            }
        }

        if (!ketemu) {
            System.out.println("Tidak ada jadwal di hari tersebut.");
        }
    }

    static void cariMK(String[][] jadwal, int n) {
        System.out.print("\nMasukkan mata kuliah: ");
        String cari = sc.nextLine();
        boolean ketemu = false;

        System.out.println("\nHasil pencarian mata kuliah " + cari + ":");
        System.out.printf("%-25s %-20s %-10s %-15s\n",
                "Mata Kuliah", "Ruang", "Hari", "Jam");
        System.out.println("----------------------------------------------------
------------------");

        for (int i = 0; i < n; i++) {
            if (jadwal[i][0].equalsIgnoreCase(cari)) {
                System.out.printf("%-25s %-20s %-10s %-15s\n",
                        jadwal[i][0], jadwal[i][1], jadwal[i][2],
jadwal[i][3]);
                ketemu = true;
            }
        }

        if (!ketemu) {
            System.out.println("Mata kuliah tidak ditemukan.");
        }
    }

    public static void main(String[] args) {

        System.out.print("Jumlah jadwal kuliah: ");
        int n = sc.nextInt();
```

```
        sc.nextLine();

        String[][] jadwal = new String[n][4];

        inputJadwal(jadwal, n);

        int menu;
        do {
            System.out.println("\n===== MENU =====");
            System.out.println("1. Tampilkan Semua Jadwal");
            System.out.println("2. Cari Berdasarkan Hari");
            System.out.println("3. Cari Berdasarkan Mata Kuliah");
            System.out.println("4. Keluar");
            System.out.print("Pilih: ");
            menu = sc.nextInt();
            sc.nextLine();

            switch (menu) {
                case 1:
                    tampilSemua(jadwal, n);
                    break;
                case 2:
                    cariHari(jadwal, n);
                    break;
                case 3:
                    cariMK(jadwal, n);
                    break;
                case 4:
                    System.out.println("Program selesai.");
                    break;
                default:
                    System.out.println("Menu tidak tersedia.");
            }

        } while (menu != 4);
    }
}
```

Hasil Running:

```
Jumlah jadwal kuliah: 3

Jadwal ke-1
Nama Mata Kuliah : Dasar Pemrograman
Ruang            : Lab Komputasi 1
Hari             : Senin
Jam              : 08.00-10.00

Jadwal ke-2
Nama Mata Kuliah : Matematika Dasar
Ruang            : Lab Komputasi 2
Hari             : Selasa
Jam              : 07.00-08.00

Jadwal ke-3
Nama Mata Kuliah : Fisika
Ruang            : Lab Komputasi 1
Hari             : Rabu
Jam              : 09.00-10.30

===== MENU =====
1. Tampilkan Semua Jadwal
2. Cari Berdasarkan Hari
3. Cari Berdasarkan Mata Kuliah
4. Keluar
Pilih: 1

================= JADWAL KULIAH =================
Mata Kuliah               Ruang                Hari       Jam
-----------------------------------------------------------------
Dasar Pemrograman         Lab Komputasi 1      Senin      08.00-10.00
Matematika Dasar          Lab Komputasi 2      Selasa     07.00-08.00
Fisika                    Lab Komputasi 1      Rabu       09.00-10.30
```

```
2. Cari Berdasarkan Hari
3. Cari Berdasarkan Mata Kuliah
4. Keluar
Pilih: 2

Masukkan hari yang dicari: Senin

Hasil pencarian hari Senin:
Mata Kuliah               Ruang                Hari       Jam
-------------------------------------------------------------------
Dasar Pemrograman         Lab Komputasi 1      Senin      08.00-10.00

===== MENU =====
1. Tampilkan Semua Jadwal
2. Cari Berdasarkan Hari
3. Cari Berdasarkan Mata Kuliah
4. Keluar
Pilih: 3

Masukkan mata kuliah: Fisika

Hasil pencarian mata kuliah Fisika:
Mata Kuliah               Ruang                Hari       Jam
-------------------------------------------------------------------
Fisika                    Lab Komputasi 1      Rabu       09.00-10.30

===== MENU =====
1. Tampilkan Semua Jadwal
2. Cari Berdasarkan Hari
3. Cari Berdasarkan Mata Kuliah
4. Keluar
Pilih: 4
Program selesai.
```