Jobsheet 1

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Pemilihan

Code :

```
package Jobsheet1AnSD;

import java.util.Scanner;

public class PrktkmPmlhn {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int nilaiTugas;
        int nilaiKuis;
        int nilaiUTS;
        int nilaiUAS;
        float a;
        float b;
        float c;
        float d;
        float nilaiAkhir;
        String nilaiHuruf = "";
        System.out.println("Program Menghitung Nilai Akhir");
        System.out.println("==============================");
        System.out.print("Masukkan Nilai Tugas : ");
        nilaiTugas =sc.nextInt();
        System.out.print("Masukkan Nilai Kuis : ");
        nilaiKuis =sc.nextInt();
        System.out.print("Masukkan Nilai UTS : ");
        nilaiUTS = sc.nextInt();
        System.out.print("Masukkan Nilai UAS : ");
        nilaiUAS = sc.nextInt();
        System.out.println("==============================");
        System.out.println("==============================");
         a = nilaiTugas * 20/100;
```

```
        b = nilaiKuis * 20/100;
        c = nilaiUTS * 30/100;
        d = nilaiUAS * 40/100;
        nilaiAkhir = a + b + c + d;
        if (nilaiAkhir <= 100 && nilaiAkhir > 80) {
            nilaiHuruf = "A";
        }else if (nilaiAkhir <= 80 && nilaiAkhir > 73) {
            nilaiHuruf = "B+";
        }else if (nilaiAkhir <= 73 && nilaiAkhir > 65) {
            nilaiHuruf = "B";
        }else if (nilaiAkhir <= 65 && nilaiAkhir > 60) {
            nilaiHuruf = "C+";
        }else if (nilaiAkhir <= 60 && nilaiAkhir > 50) {
            nilaiHuruf = "C";
        }else if (nilaiAkhir <= 50 && nilaiAkhir > 39) {
            nilaiHuruf = "D";
        }else if (nilaiAkhir <= 39) {
            nilaiHuruf = "E";
        }
        if (nilaiTugas > 100 || nilaiKuis > 100 || nilaiUTS > 100 || nilaiUAS >
100) {
            System.out.println("Nilai Tidak Valid");


        }else{
              System.out.println("Nilai Akhir : " + nilaiAkhir);
              System.out.println("Nilai Huruf : " + nilaiHuruf);

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


    }
}
```

Output :

```
Program Menghitung Nilai Akhir
==============================
Masukkan Nilai Tugas : 90
Masukkan Nilai Kuis : 86
Masukkan Nilai UTS : 85
Masukkan Nilai UAS : 93
==============================
==============================
Nilai Akhir : 97.0
Nilai Huruf : A
==============================
PS C:\Users\tempe\Documents\java\MatKul\Algrtm&StrktrDsr>
```

Perulangan

Code :

```java
package Jobsheet1AnSD;

import java.util.Scanner;

public class PrktkmPnglgn {
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        long nimGw ;
        System.out.print("Masukkan NIM Anda : ");
        nimGw = sc.nextLong();
        long nimakhirgw = nimGw % 100;




        for (int i = 1;i <= nimakhirgw;i++){
            if (i == 10 || i == 15) {

            }else if (i % 3 == 0) {
                 System.out.print(" # ");
            }else if (i %  2 == 1) {
                System.out.print(" * ");
            } else{
            System.out.print(i);
            }
            System.out.print(" ");



        }
```

```
    }
}
```

Output :

```
Masukkan NIM Anda : 254107020216
 *  2  #  4  *   #   *  8  #   *   #   *  14  16
PS C:\Users\tempe\Documents\java\MatKul\Algrtm&StrktrDsr>
```

Array

Code :

```
package Jobsheet1AnSD;

import java.util.Scanner;

public class PrktkmArry {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        float [] nilai = new float[8];
        String [] nilaiHuruf1 = new String[8];
        double [] nilaiBobot = new double[8];
        String [] matKul = new String[8];
        int [] bobotSKS = new int[8];
        double bobotSKSFinal = 0;
        double nilaiFinal = 0;
        String nilaiHuruf = "";
        double total=0;
        int totalSKS = 0;
        System.out.println("================================================");
        System.out.println("Program Menghitung IP Semester");
        System.out.println("================================================");
        for (int a = 0;a <= 7;a++){
            System.out.print("Masukkan nama Mata Kuliah ke-"+(a+1)+" : ");
            matKul [a] =sc.nextLine();
        }
        for (int c = 0;c <= 7;c++){
            System.out.print("Masukkan nilai Mata Kuliah "+matKul [c]+ " : ");
            nilai [c] =sc.nextFloat();
            nilaiFinal = nilai [c];

        }
```

```
        for (int d = 0;d <= 7;d++){
            System.out.println("Masukkan Bobot SKS : ");
            bobotSKS [d] = sc.nextInt();
            bobotSKSFinal = bobotSKS [d];
        }
        for (int i = 0 ; i <= 7;i++){
        if (nilai [i] <= 100 && nilai [i] > 80) {
            nilaiHuruf = "A";
            nilaiHuruf1 [i] = nilaiHuruf;
        }else if (nilai [i] <= 80 && nilai [i] > 73) {
            nilaiHuruf = "B+";
            nilaiHuruf1 [i]= nilaiHuruf;
        }else if (nilai [i] <= 73 && nilai [i] > 65) {
            nilaiHuruf = "B";
            nilaiHuruf1 [i] = nilaiHuruf;
        }else if (nilai [i] <= 65 && nilai [i] > 60) {
            nilaiHuruf = "C+";
            nilaiHuruf1 [i] = nilaiHuruf;
        }else if (nilai [i] <= 60 && nilai [i] > 50) {
            nilaiHuruf = "C";
            nilaiHuruf1 [i] = nilaiHuruf;
        }else if (nilai [i] <= 50 && nilai [i] > 39) {
            nilaiHuruf = "D";
            nilaiHuruf1 [i] = nilaiHuruf;
        }else if (nilai [i] <= 39) {
            nilaiHuruf = "E";
            nilaiHuruf1 [i] = nilaiHuruf;
        }
        }
        for (int j = 0;j <= 7;j++){
            if (nilaiHuruf1 [j] == "A") {
                nilaiBobot [j] = 4.00;
            }else if (nilaiHuruf1 [j] == "B+") {
                nilaiBobot [j] = 3.50;
            }else if (nilaiHuruf1 [j] == "B") {
                nilaiBobot [j] = 3.00;
            }else if (nilaiHuruf1 [j] == "C+" ) {
                nilaiBobot [j] = 2.50;
            }else if (nilaiHuruf1 [j] == "C") {
                nilaiBobot [j] = 2.00;
            }
        }
        System.out.println("================================================");
        System.out.println("Hasil Konversi Nilai");
```

```
        System.out.println("================================================");
        System.out.println("Matkul \t \t Nilai Angka \t\t Nilai Huruf \t Bobot
Nilai");
        for (int b = 0;b <= 7;b++){
            System.out.println(matKul[b] +"\t\t\t"+ nilai [b] +"\t\t\t"+
nilaiHuruf1 [b] +"\t\t"+ nilaiBobot[b]);
        }
        for (int g = 0;g <=7;g++){
            total =+ (nilaiBobot[g] * bobotSKS [g]);
            totalSKS =+ bobotSKS[g];
        }
        double ip = total /totalSKS;

System.out.println("================================================");
        System.out.println("IP : "+ ip);

    }
}
```

Output :

```
================================================
Hasil Konversi Nilai
================================================
Matkul          Nilai Angka             Nilai Huruf     Bobot Nilai
pancasila                       98.0                    A               4.0
ctps                    86.0                    A               4.0
matdas                  84.0                    A               4.0
kti                     92.0                    A               4.0
b ing                   85.0                    A               4.0
daspro                  76.0                    B+              3.5
prkt                    90.0                    A               4.0
k3                      74.0                    B+              3.5
================================================
IP : 3.5
```

Fungsi

Code :

```
package Jobsheet1AnSD;

public class PrktkmFngsi {
```

```java
    public static int hitungPendapatan(int[] stok, int[] harga) {
        int total = 0;
        for (int i = 0; i < stok.length; i++) {
            total += stok[i] * harga[i];
        }
        return total;
    }

    public static String statusCabang(int pendapatan) {
        if (pendapatan > 1500000) {
            return "Sangat Baik";
        } else {
            return "Perlu Evaluasi";
        }
    }

    public static void main(String[] args) {

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

        int[] hargaBunga = {75000, 50000, 60000, 10000};

        for (int i = 0; i < stokBunga.length; i++) {
            int pendapatan = hitungPendapatan(stokBunga[i], hargaBunga);
            String status = statusCabang(pendapatan);

            System.out.println("RoyalGarden " + (i + 1));
            System.out.println("Pendapatan : Rp." + pendapatan);
            System.out.println("Status     : " + status);
            System.out.println();
        }
    }
}
```

Output:

```
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
```

Tugas 1

Code :

```
package Jobsheet1AnSD;

import java.util.Scanner;

public class Tgs1 {
    public static void main(String[] args) {
        Scanner sc =new Scanner(System.in);

        char namaPlat [] ={'A','B','D','E','F','G','H','L','N','T'};
        char namaKota [][] ={
            {'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 inputKode =sc.next().charAt(0);
```

```
        for (int i = 0; i < namaPlat.length; i++) {
            if (inputKode == namaPlat[i]) {
                for (int j = 0;j < 12 ;j++){
                    System.out.print(namaKota[i][j]);
                }
                break;
            }
        }
    }
}
```

Output :

```
Masukkan kode plat : B
JAKARTA
PS C:\Users\tempe\Documents\
```

Tugas 2

Code :

```
package Jobsheet1AnSD;

import java.util.Scanner;

public class Tgs2 {

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

    public static void main(String[] args) {

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

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

        inputJadwal(jadwal);
        tampilSemuaJadwal(jadwal);

        System.out.print("\nCari jadwal berdasarkan hari: ");
        String hari = sc.nextLine();
```

```
        tampilJadwalByHari(jadwal, hari);

        System.out.print("\nCari jadwal berdasarkan mata kuliah: ");
        String matkul = sc.nextLine();
        tampilJadwalByMatkul(jadwal, matkul);
    }


    static void inputJadwal(String[][] jadwal) {
        for (int i = 0; i < jadwal.length; 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 tampilSemuaJadwal(String[][] jadwal) {
        System.out.println("\n=== DAFTAR JADWAL KULIAH ===");
        System.out.println("Mata Kuliah | Ruang | Hari | Jam");
        System.out.println("--------------------------------");

        for (int i = 0; i < jadwal.length; i++) {
            for (int j = 0; j < 4; j++) {
                System.out.print(jadwal[i][j] + " | ");
            }
            System.out.println();
        }
    }


    static void tampilJadwalByHari(String[][] jadwal, String hari) {
        boolean ketemu = false;
```

```
        for (int i = 0; i < jadwal.length; i++) {
            if (jadwal[i][2].equalsIgnoreCase(hari)) {
                System.out.println(jadwal[i][0] + " | " +
                                   jadwal[i][1] + " | " +
                                   jadwal[i][2] + " | " +
                                   jadwal[i][3]);
                ketemu = true;
            }
        }

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


    static void tampilJadwalByMatkul(String[][] jadwal, String matkul) {
        boolean ketemu = false;

        for (int i = 0; i < jadwal.length; i++) {
            if (jadwal[i][0].equalsIgnoreCase(matkul)) {
                System.out.println(jadwal[i][0] + " | " +
                                   jadwal[i][1] + " | " +
                                   jadwal[i][2] + " | " +
                                   jadwal[i][3]);
                ketemu = true;
            }
        }

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

Output :

1.
```
Jadwal ke-1
Nama Mata Kuliah : daspro
Ruang            : lpy
Hari             : rabu
Jam              : 8

Jadwal ke-2
Nama Mata Kuliah : agama
Ruang            : rt
Hari             : jumat
Jam              : 10
```

2.
```
=== DAFTAR JADWAL KULIAH ===
Mata Kuliah | Ruang | Hari | Jam
-------------------------------
daspro | lpy | rabu | 8 |
agama | rt | jumat | 10 |
```

3.
```
Cari jadwal berdasarkan hari: rabu
daspro | lpy | rabu | 8
```

4.
```
Cari jadwal berdasarkan mata kuliah: agama
agama | rt | jumat | 10
```