JOBSHEET 1

MUHAMMAD NAZRIL NUR RAHMAN

https://github.com/nazrilnr/JobSMT2

2.1

```java
import java.util.Scanner;
public class pemilihannilai {
    Run | Debug
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.println(x:"Pemograman Menghitung Nilai Akhir");
        System.out.println(x:"=====================================");

        System.out.print(s:"Masukkan Nilai Tugas: ");
        int tugas = input.nextInt();
        System.out.print(s:"Masukkan Nilai Kuis : ");
        int kuis = input.nextInt();
        System.out.print(s:"Masukkan Nilai UTS  : ");
        int uts = input.nextInt();
        System.out.print(s:"Masukkan Nilai UAS  : ");
        int uas = input.nextInt();
        System.out.println(x:"==================");

        double nilaiAkhir = (0.2 * tugas) + (0.3 * kuis) + (0.35 * uts) + (0.15 * uas);

        if (nilaiAkhir >= 60) {
            System.out.println("Nilai Akhir: " + nilaiAkhir);
            System.out.println(x:"SELAMAT ANDA LULUS");
            if (nilaiAkhir >= 80) {
                System.out.println(x:"Nilai Huruf: A");
            } else if (nilaiAkhir >= 73) {
                System.out.println(x:"Nilai Huruf: B+");
            } else if (nilaiAkhir >= 65) {
                System.out.println(x:"Nilai Huruf: B");
            } else if (nilaiAkhir >= 60) {
                System.out.println(x:"Nilai Huruf: C+");
            } else if (nilaiAkhir >= 50){
                System.out.println(x:"Nilai Huruf: C");
            } else {
                System.out.println(x:"Nilai Huruf: D");
            }
        } else {
            System.out.println(x:"nilai tidak valid");
        }
    }
}
```

```
Pemograman Menghitung Nilai Akhir
==================================
Masukkan Nilai Tugas: 90
Masukkan Nilai Kuis : 88
Masukkan Nilai UTS  : 87
Masukkan Nilai UAS  : 87
==================
Nilai Akhir: 87.89999999999999
SELAMAT ANDA LULUS
Nilai Huruf: A
nazril@Muhammads-MacBook-Air Job_1 %
```

2.2

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

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

        // Mendapatkan 2 digit terakhir NIM
        int n = Integer.parseInt(nim.substring(nim.length() - 2));

        // Jika n < 10, tambahkan 10
        if (n < 10) {
            n += 10;
        }

        // Menampilkan deretan bilangan
        System.out.print(s:"OUTPUT: ");
        System.out.println("n = " + n);
        for (int i = 1; i <= n; i++) {
            if (i != 6 && i != 10) {
                if (i % 2 != 0) {
                    System.out.print(s:"* ");
                } else {
                    System.out.print(i + " ");
                }
            }
        }
    }
}
```

```
Masukkan NIM: 2341760174
OUTPUT: n = 74
* 2 * 4 * * 8 * * 12 * 14 * 16 * 18 * 20 * 22 * 24 * 26 * 28 * 30 * 32 * 34 * 36 * 38 * 40 * 42 * 44 * 46 * 48 * 50 * 52 * 54 * 56 * 58 * 60 * 62 *
64 * 66 * 68 * 70 * 72 * 74 *
nazril@Muhammads-MacBook-Air Job_1 %
```

2.3

```java
import java.util.Scanner;
import java.util.ArrayList;
import java.util.List;

public class array {
    private static List<List> arrayMatakuliah = new ArrayList<>();
    private static  Scanner input = new Scanner(System.in);
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        double[] sksWeights = { 3, 3, 3, 4, 2, 3, 2, 2 };
        double[] equivalentValues = { 3.5, 4.0, 3.0, 3.5, 4.0, 2.0, 2.0, 4.0 };

        double totalWeightedValue = 0;
        double totalSKS = 0;
        // double equivalentValues = 0;

        // Input data for each course
        String[] courses = {
            "Pancasila",
            "Konsep Teknologi Informasi",
            "Critical Thinking dan Problem Solving",
            "Matematika Dasar",
            "Bahasa Inggris",
            "Dasar Pemrograman",
            "Praktikum Dasar Pemrograman",
            "Keselamatan dan Kesehatan Kerja"
        };

        for (int i = 0; i < courses.length; i++) {
            System.out.print("Masukkan nilai Angka untuk MK " + courses[i] + ": ");
            double nilaiAngka = scanner.nextDouble();

            if (nilaiAngka < 0 || nilaiAngka > 100) {
                System.out.println(x:"Nilai tidak valid");
                return;
            }

            totalWeightedValue += nilaiAngka * sksWeights[i];
            totalSKS += sksWeights[i];
        }
```

```java
        double ipSemester = totalWeightedValue / totalSKS;

        System.out.println("\nIP Semester: " + ipSemester);
        System.out.println("Keterangan: " + getKeterangan(ipSemester));

        if(arrayMatakuliah.size() < 1){
            System.out.println(x:"Belum ada data Matakuliah yang dimasukkan");
            return;
        }else{
            System.out.println(x:"Matakuliah yang Anda ambil adalah: ");
            int gradeSKS = 0;
            double totalGradeSKS = 0;
            double countSKS = 0;
            for(int i = 0; i < arrayMatakuliah.size(); i++){
                String kdMatakuliah = (arrayMatakuliah.get(i)).get(index:0).toString();
                String nmMatakuliah = (arrayMatakuliah.get(i)).get(index:1).toString();
                String grMataKuliah = (arrayMatakuliah.get(i)).get(index:2).toString().toUpperCase();
                String sksMatakuliah = (arrayMatakuliah.get(i)).get(index:3).toString();

                System.out.println(kdMatakuliah + "     " + nmMatakuliah + "     " + grMataKuliah + "     " + sksMatakuliah );
                int grade;
                switch (grMataKuliah){
                    case "A":
                        grade = 4;
                        break;
                    case "B":
                        grade = 3;
                        break;
                    case "C":
                        grade = 2;
                        break;
                    case "D":
                        grade = 1;
                        break;
                    default:
                        grade = 0;
                        break;
                }
                gradeSKS = grade * Integer.parseInt(sksMatakuliah);
                totalGradeSKS = totalGradeSKS + gradeSKS;
                countSKS = countSKS + Integer.parseInt(sksMatakuliah);
            }
```

```java
                default:
                        grade = 0;
                        break;
                }
                gradeSKS = grade * Integer.parseInt(sksMatakuliah);
                totalGradeSKS = totalGradeSKS + gradeSKS;
                countSKS = countSKS + Integer.parseInt(sksMatakuliah);
            }

            double nilaiIPS = totalGradeSKS / countSKS;
            System.out.println("Nilai IPS Anda adalah " + nilaiIPS);
        }
    }

    public static String getKeterangan(double ip) {
        if (ip >= 2.75) {
            return "LULUS";
        } else {
            return "TIDAK LULUS";
        }
    }
}
```

```
Masukkan nilai Angka untuk MK Pancasila: 80
Masukkan nilai Angka untuk MK Konsep Teknologi Informasi: 90
Masukkan nilai Angka untuk MK Critical Thinking dan Problem Solving: 97
Masukkan nilai Angka untuk MK Matematika Dasar: 89
Masukkan nilai Angka untuk MK Bahasa Inggris: 90
Masukkan nilai Angka untuk MK Dasar Pemrograman: 90
Masukkan nilai Angka untuk MK Praktikum Dasar Pemrograman: 97
Masukkan nilai Angka untuk MK Keselamatan dan Kesehatan Kerja: 90

IP Semester: 90.04545454545455
Keterangan: LULUS
Belum ada data Matakuliah yang dimasukkan
nazril@Muhammads-MacBook-Air Job_1 %
```

2.4

```java
public class royalgarden {
    Run | Debug
    public static void main(String[] args) {
        tampilpendapatan();
        jumlahstok();
    }
    static void tampilpendapatan () {
    int[][] stock = {
            {10, 5, 15, 7},
            {6, 11, 9, 12},
            {2, 10, 10, 5},
            {5, 7, 12, 9}
        };

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

        // Menghitung pendapatan setiap cabang
        for (int i = 0; i < stock.length; i++) {
            int pendapatanCabang = 0;
            for (int j = 0; j < stock[i].length; j++) {
                pendapatanCabang += stock[i][j] * harga[j];
            }
            System.out.println("Pendapatan RoyalGarden " + (i + 1) + ": Rp " + pendapatanCabang);
        }
    };
    static void jumlahstok() {
        int[][] stock = {
            {10, 5, 15, 7},
            {6, 11, 9, 12},
            {2, 10, 10, 5},
            {5, 7, 12, 9}
        };

        // Pengurangan stock karena bunga mati
        stock[3][0] -= 1; // Aglonema
        stock[3][1] -= 2; // Keladi
        // Alocasia tidak berubah
        stock[3][3] -= 5; // Mawar

        // Menampilkan jumlah stock setiap jenis bunga pada cabang RoyalGarden 4
        System.out.println(x:"Jumlah Stock pada Cabang RoyalGarden 4:");
        System.out.println("Aglonema: " + stock[3][0]);
        System.out.println("Keladi: " + stock[3][1]);
```

```
Pendapatan RoyalGarden 1: Rp 1970000
Pendapatan RoyalGarden 2: Rp 1660000
Pendapatan RoyalGarden 3: Rp 1300000
Pendapatan RoyalGarden 4: Rp 1535000
Jumlah Stock pada Cabang RoyalGarden 4:
Aglonema: 4
Keladi: 5
Alocasia: 12
Mawar: 4
nazril@Muhammads-MacBook-Air Job_1 %
```