**JOBSHEET 1   
SAFRIZAL RAHMAN  
LINK GITHUB :** [**https://github.com/safrizalrahman46/Jobsheet1\_Sem2**](https://github.com/safrizalrahman46/Jobsheet1_Sem2)

**2.1**

*/\*\**

*\* HitungNilaiAkhir22*

*\*/*

import java.util.Scanner;

public class HitungNilaiAkhir22 {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

*// Input komponen nilai*

        System.out.print("Masukkan nilai tugas: ");

        int tugas = scanner.nextInt();

        System.out.print("Masukkan nilai kuis: ");

        int kuis = scanner.nextInt();

        System.out.print("Masukkan nilai UTS: ");

        int uts = scanner.nextInt();

        System.out.print("Masukkan nilai UAS: ");

        int uas = scanner.nextInt();

*// Memanggil fungsi untuk menghitung nilai akhir*

        Object[] hasil = hitungNilaiAkhir(tugas, kuis, uts, uas);

*// Menampilkan output*

        if (hasil[0].equals("nilai tidak valid")) {

            System.out.println("Output: " + hasil[0]);

        } else {

            System.out.println("Program Menghitung Nilai Akhir: ");

            System.out.println("Nilai Tugas = " + tugas);

            System.out.println("Nilai Kuis  = " + kuis);

            System.out.println("Nilai UTS = " + uts);

            System.out.println("Nilai UAS  = " + uas);

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

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

            System.out.println("Nilai akhir: " + hasil[0]);

            System.out.println("Nilai huruf: " + hasil[1]);

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

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

            System.out.println("" + hasil[2]);

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

        }

    }

    public static Object[] hitungNilaiAkhir(int tugas, int kuis, int uts, int uas) {

        Object[] result = new Object[3];

*// Memeriksa apakah nilai masukan valid (0-100)*

        if (tugas < 0 || tugas > 100 || kuis < 0 || kuis > 100 || uts < 0 || uts > 100 || uas < 0 || uas > 100) {

            result[0] = "nilai tidak valid";

            return result;

        }

*// Menghitung nilai akhir*

        double nilaiAkhir = 0.2 \* tugas + 0.2 \* kuis + 0.3 \* uts + 0.4 \* uas;

*// Mengkonversi nilai ke huruf*

        String nilaiHuruf;

        if (nilaiAkhir >= 80) {

            nilaiHuruf = "A";

        } else if (nilaiAkhir >= 73) {

            nilaiHuruf = "B+";

        } else if (nilaiAkhir >= 65) {

            nilaiHuruf = "B";

        } else if (nilaiAkhir >= 60) {

            nilaiHuruf = "C+";

        } else if (nilaiAkhir >= 50) {

            nilaiHuruf = "C";

        } else if (nilaiAkhir >= 39) {

            nilaiHuruf = "D";

        } else {

            nilaiHuruf = "E";

        }

*// Menentukan keterangan LULUS/TIDAK LULUS*

        String keterangan = nilaiHuruf.equals("D") || nilaiHuruf.equals("E") ? "TIDAK LULUS" : "LULUS";

        result[0] = nilaiAkhir;

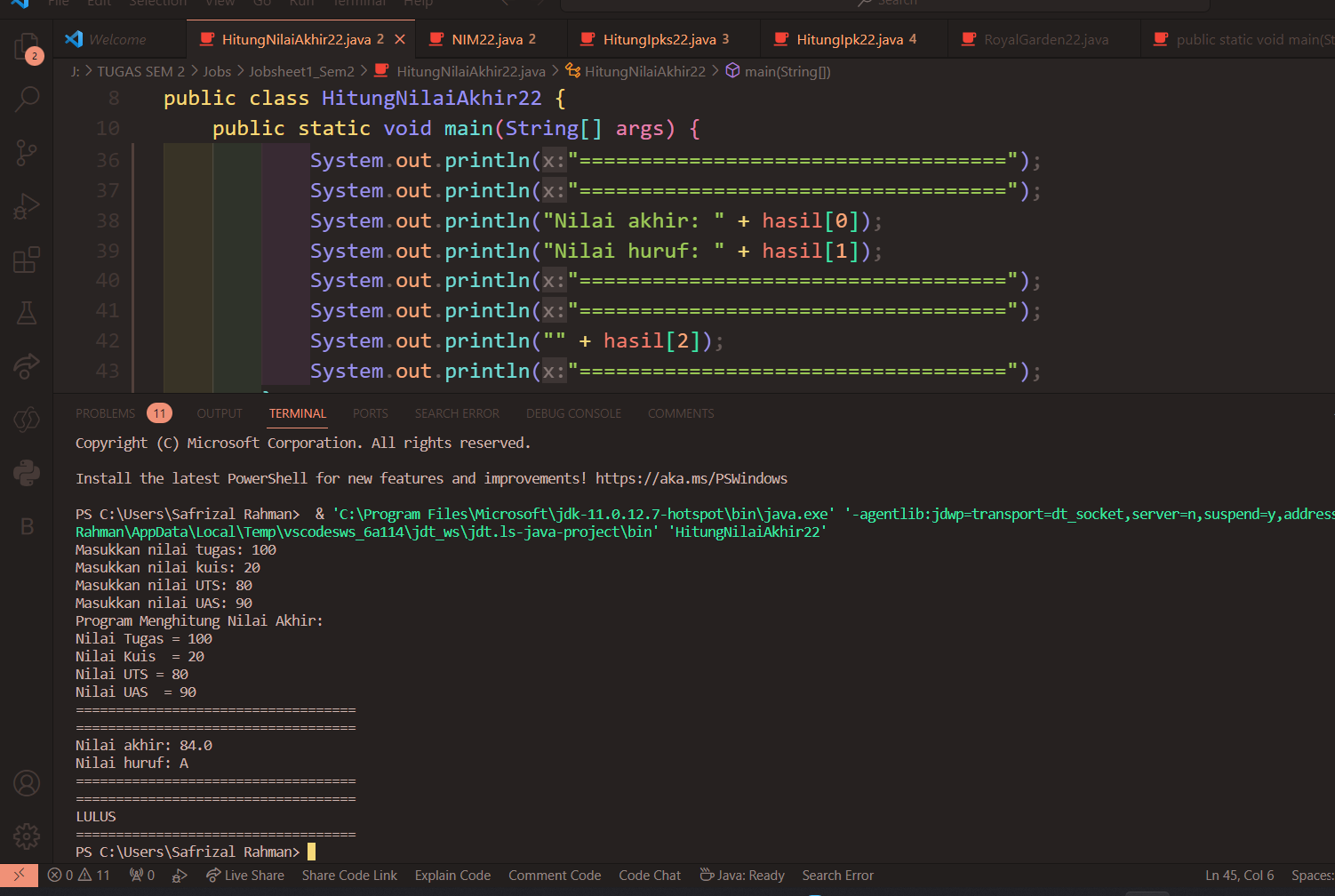
        result[1] = nilaiHuruf;

        result[2] = keterangan;

        return result;

    }

}

****

**2.2**

import java.util.Scanner;

public class NIM22 {

    public static void main(String[] args) {

        Scanner safrizal22 = new Scanner(System.in);

*// Input NIM*

        System.out.print("Masukkan NIM: ");

        String nim = safrizal22.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("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("\* ");

                } else {

                    System.out.print(i + " ");

                }

            }

        }

    }

}

****

**2.3**

*/\*\**

*\* Array22*

*\*/*

import java.util.Scanner;

import java.util.ArrayList;

import java.util.List;

public class Array22 {

    private static List<List> arrayMatakuliah22 = new ArrayList<>();

    private static  Scanner safrizal22 = new Scanner(System.in);

    public static void main(String[] args) {

*// Daftar matakuliah dan bobot SKS*

     String[] course = {

        "Pancasila",

        "Konsep Teknologi Informasi",

        "Critical Thinking dan Problem Solving",

        "Matematika Dasar",

        "Bahasa Inggris",

        "Dasar Pemrograman",

        "Praktikum Dasar Pemrograman",

        "Keselamatan dan Kesehatan Kerja"

    };

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

        System.out.println("                                          Hitung Nilai IP Seoul University                       ");

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

        Scanner safrizal22 = new Scanner(System.in);

        int[] sks = {2,2,2,3,2,2,3,2};

        double[] nilaiAngka = new double[8];

        String[] nilaiHuruf = new String[8];

        double[] bobotNilai = new double[8];

        double ip, totalIP = 0, ipSemester;

        int totalSKS = 0;

        for (int i = 0; i < course.length; i++) {

            System.out.print("Masukkan nilai angka untuk course " + course[i] + ": ");

            nilaiAngka[i] = safrizal22.nextDouble();

            if (nilaiAngka[i] <= 100 && nilaiAngka[i] > 80) {

                nilaiHuruf[i] = "A";

                bobotNilai[i] = 4;

            } else if (nilaiAngka[i] <= 79 && nilaiAngka[i] > 73) {

                nilaiHuruf[i] = "B+";

                bobotNilai[i] = 3.5;

            } else if (nilaiAngka[i] <= 72 && nilaiAngka[i] > 65) {

                nilaiHuruf[i] = "B";

                bobotNilai[i] = 3;

            } else if (nilaiAngka[i] <= 64 && nilaiAngka[i] > 60) {

                nilaiHuruf[i] = "C+";

                bobotNilai[i] = 2.5;

            } else if (nilaiAngka[i] <= 59 && nilaiAngka[i] > 50) {

                nilaiHuruf[i] = "C";

                bobotNilai[i] = 2;

            } else if (nilaiAngka[i] <= 49 && nilaiAngka[i] > 39) {

                nilaiHuruf[i] = "D";

                bobotNilai[i] = 1;

            } else if (nilaiAngka[i] <= 39) {

                nilaiHuruf[i] = "E";

                bobotNilai[i] = 0;

            }

        }

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

        System.out.println("                                            Hasil Konversi Nilai                                ");

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

        System.out.printf("%-40s %-15s %-15s %-15s \n", "course", "Nilai Angka", "Nilai Huruf", "Bobot Nilai");

        for (int i = 0;i < course.length;i++) {

            System.out.printf("%-43s %-17s %-14s %-1s \n", course[i], nilaiAngka[i], nilaiHuruf[i], bobotNilai[i]);

        }

        for (int i = 0;i < course.length;i++) {

            ip = bobotNilai[i] \* sks[i];

            totalIP += ip;

            totalSKS += sks[i];

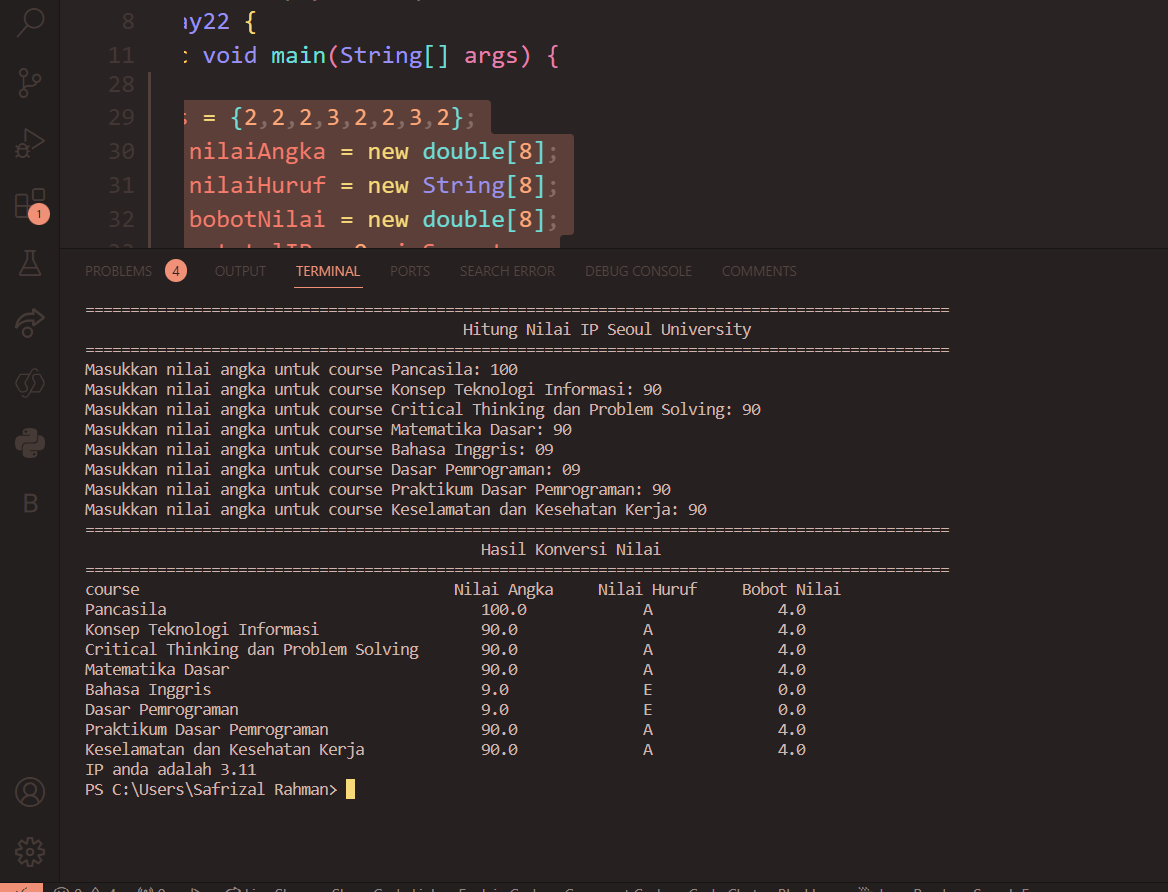
        }

        ipSemester = totalIP/totalSKS;

        System.out.printf("IP anda adalah " + "%.2f", ipSemester);

    }

}

****

**2.4**

public class RoyalGarden22 {

    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("Jumlah Stock pada Cabang RoyalGarden 4:");

        System.out.println("Aglonema: " + stock[3][0]);

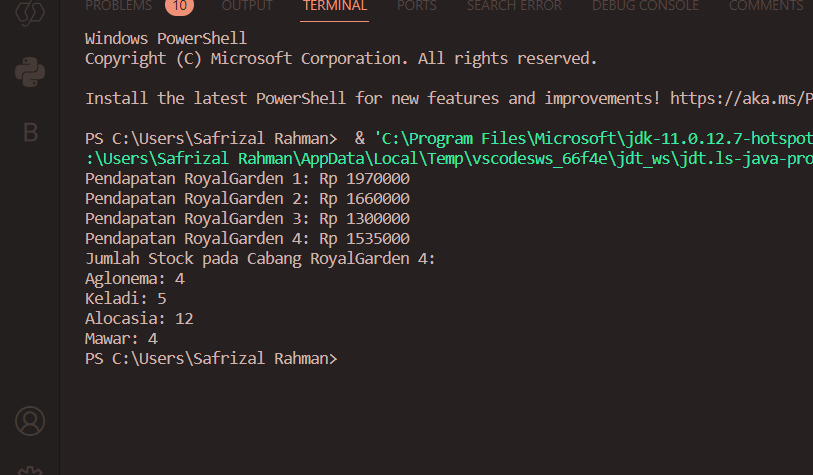
        System.out.println("Keladi: " + stock[3][1]);

        System.out.println("Alocasia: " + stock[3][2]);

        System.out.println("Mawar: " + stock[3][3]);

    }

    };

****

**Task**

import java.util.Scanner;

public class Plat22 {

*// Array kode plat mobil*

    static char[] KODE = {'A','B', 'D', 'E','F', 'G', 'H', 'L', 'N', 'T'};

*// Array nama kota yang berpasangan dengan kode plat mobil*

    static String[][] KOTA = {

        {"Banten"},

        {"Jakarta"},

        {"Bandung"},

        {"Cirebon"},

        {"Bogor"},

        {"Pekalongan"},

        {"Semarang"},

        {"Surabaya"},

        {"Malang"},

        {"Tegal"}

    };

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

*// Meminta input kode plat mobil dari pengguna*

        System.out.print("Masukkan kode plat mobil: ");

        char kode = scanner.next().charAt(0);

*// Mencari nama kota berdasarkan kode plat mobil*

        String kota = cariKota(kode);

        if (kota != null) {

            System.out.println("Kota: " + kota);

        } else {

            System.out.println("Kode plat tidak valid.");

        }

*// Memanggil fungsi untuk menghitung kecepatan*

        hitungKecepatan();

*// Memanggil fungsi untuk menghitung jarak*

        hitungJarak();

*// Memanggil fungsi untuk menghitung waktu*

        hitungWaktu();

    }

*// Fungsi untuk mencari nama kota berdasarkan kode plat mobil*

    static String cariKota(char kode) {

        for (int i = 0; i < KODE.length; i++) {

            if (KODE[i] == kode) {

                return KOTA[i][0]; *// Mengembalikan nama kota pertama yang berpasangan dengan kode plat mobil*

            }

        }

        return null; *// Mengembalikan null jika kode plat tidak ditemukan*

    }

*// Fungsi untuk menghitung kecepatan*

    static void hitungKecepatan() {

        Scanner scanner = new Scanner(System.in);

        System.out.println("\n=== Menghitung Kecepatan ===");

        System.out.print("Masukkan jarak (km): ");

        double jarak = scanner.nextDouble();

        System.out.print("Masukkan waktu (jam): ");

        double waktu = scanner.nextDouble();

        double kecepatan = jarak / waktu;

        System.out.println("Kecepatan: " + kecepatan + " km/jam");

    }

*// Fungsi untuk menghitung jarak*

    static void hitungJarak() {

        Scanner scanner = new Scanner(System.in);

        System.out.println("\n=== Menghitung Jarak ===");

        System.out.print("Masukkan kecepatan (km/jam): ");

        double kecepatan = scanner.nextDouble();

        System.out.print("Masukkan waktu (jam): ");

        double waktu = scanner.nextDouble();

        double jarak = kecepatan \* waktu;

        System.out.println("Jarak: " + jarak + " km");

    }

*// Fungsi untuk menghitung waktu*

    static void hitungWaktu() {

        Scanner scanner = new Scanner(System.in);

        System.out.println("\n=== Menghitung Waktu ===");

        System.out.print("Masukkan jarak (km): ");

        double jarak = scanner.nextDouble();

        System.out.print("Masukkan kecepatan (km/jam): ");

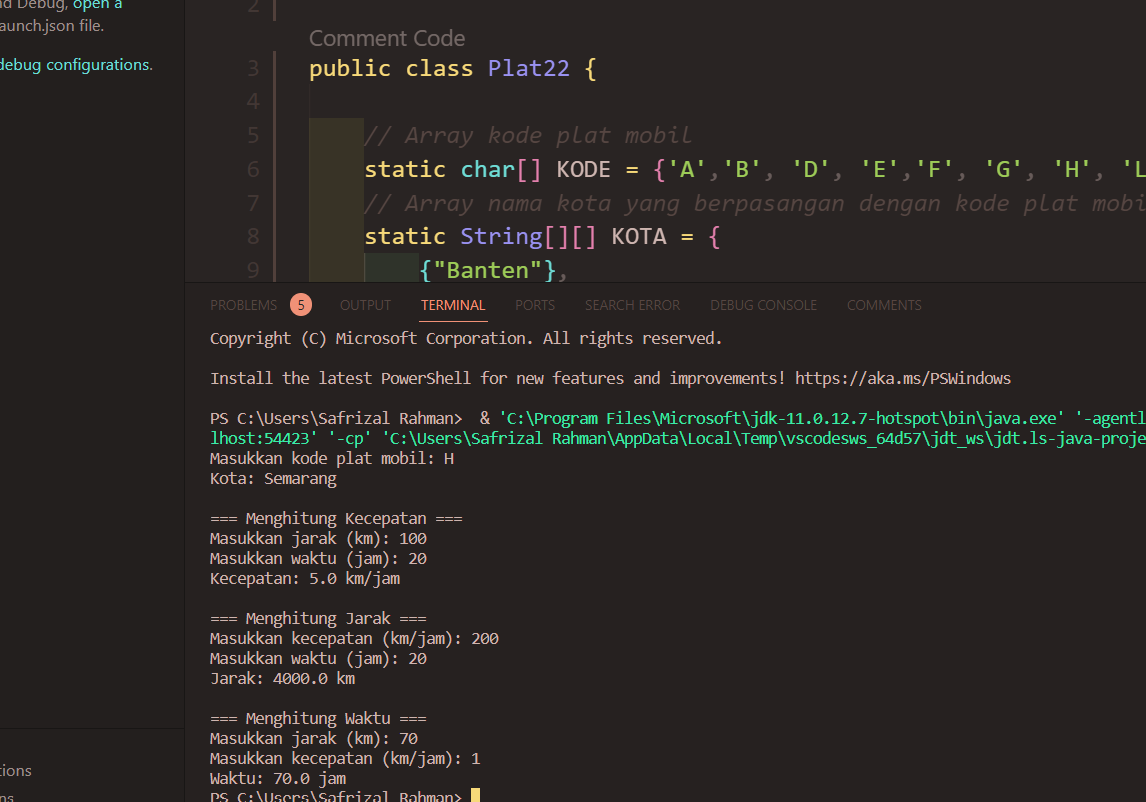
        double kecepatan = scanner.nextDouble();

        double waktu = jarak / kecepatan;

        System.out.println("Waktu: " + waktu + " jam");

    }

}

****