JOBSHEET 1
POLITEKNIK NEGERI MALANG TAHUN 2025/2026

Oleh :

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PROGRAM STUDI
D-IV SISTEM INFORMASI BISNIS
JURUSAN TEKNOLOGI INFORMASI
POLITEKNIK NEGERI MALANG
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JOBSHEET 1

DASAR PEMOGRAMAN

1. Pemilihan

```java
import java.util.Scanner;

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

        System.out.println("program menghitung Nilai Akhir");
        System.out.println("======================");

        System.out.print("Masukkan nilai tugas: ");
        int tugas = sc.nextInt();
        System.out.print("Masukkan nilai kuis : ");
        int kuis = sc.nextInt();
        System.out.print("Masukkan nilai uts  : ");
        int uts = sc.nextInt();
        System.out.print("Masukkan nilai uas  : ");
        int uas = sc.nextInt();

        double total = (tugas * 0.2) + (kuis * 0.2) + (uts * 0.3) + (uas * 0.3);

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

        if (total < 0 || total > 100) {
            System.out.println("Nilai total tidak valid");
        } else {
            String nilaiHuruf;
            if (total > 80) {
                nilaiHuruf = "A";
            } else if (total > 73) {
                nilaiHuruf = "B+";
            } else if (total > 65) {
                nilaiHuruf = "B";
            } else if (total > 60) {
                nilaiHuruf = "C+";
            } else if (total > 50) {
                nilaiHuruf = "C";
            } else if (total > 39) {
                nilaiHuruf = "D";
            } else {
                nilaiHuruf = "E";
            }

            System.out.printf("Nilai total: %.2f\n", total);
            System.out.println("Nilai huruf: " + nilaiHuruf);
            System.out.println("======================");

            System.out.print("Status Kelulusan: ");
            if (nilaiHuruf.equals("E") || nilaiHuruf.equals("D")) {
                System.out.println("Tidak Lulus");
            } else {
                System.out.println("Lulus");
            }
        }
    }
}
```

https://github.com/dancelhal2000/jobsheet1-ASD/blob/main/hitungnilai.java

```
program menghitung Nilai Akhir
======================
Masukkan nilai tugas: 80
Masukkan nilai kuis : 76
Masukkan nilai uts  : 87
Masukkan nilai uas  : 56
======================
Nilai total: 74.10
Nilai huruf: B+
======================
Status Kelulusan: Lulus
```

```
program menghitung Nilai Akhi
======================
Masukkan nilai tugas: 97
Masukkan nilai kuis : 85
Masukkan nilai uts  : 78
Masukkan nilai uas  : 999
======================
Nilai total tidak valid
[bibb@bibb-b450mk jobsheet1-A
```

2. Perulangan

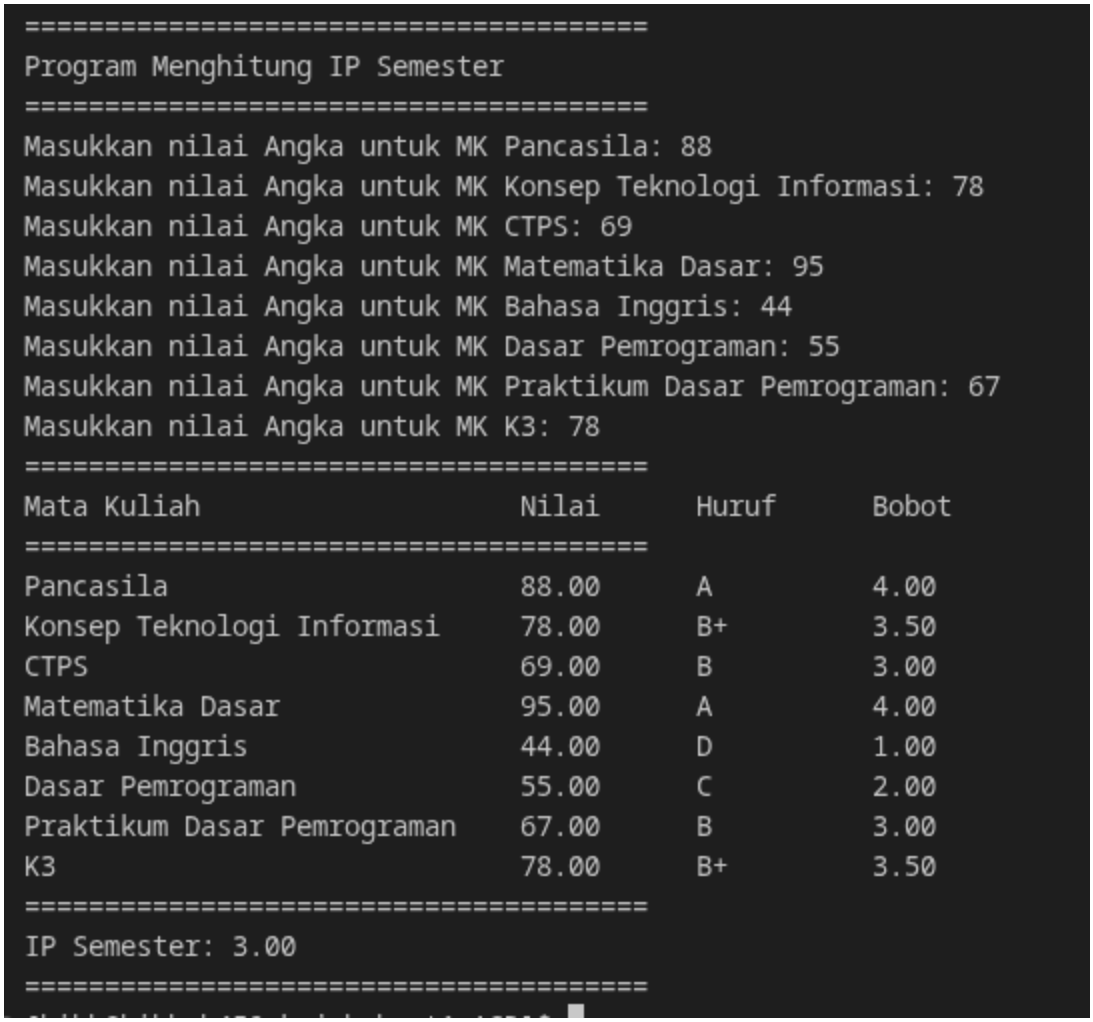
```java
import java.util.Scanner;

public class program2 {
    static Scanner sc = new Scanner(System.in);

    Run | Debug
    public static void main(String[] args) {
        System.out.print("Input nim : ");
        long nim = sc.nextLong();
        int n = (int) (nim % 100);
        System.out.println("n = " + n);
        if (n < 10) {
            n = n + 10;
        }
        for (int i = 1; i <= n; i++) {
            if (i == 10 || i == 15) {
                continue;
            } else if (i % 3 == 0) {
                System.out.print("#");
            } else if (i % 2 != 0) {
                System.out.print("*");
            } else {
                System.out.print(i);
            }
            System.out.print(" ");
        }
    }
}
```

https://github.com/dancelhal2000/jobsheet1-ASD/blob/main/perulangan.java

```
Input nim : 254107060035
n = 35
* 2 # 4 * # * 8 # * # * 14 16 * # * 20 # 22 * # * 26 # 28 * # * 32 # 34 *
```

3. Array

```java
import java.util.Scanner;

public class nilai {
    static Scanner sc = new Scanner(System.in);

    static String[] namaMK = {
            "Pancasila",
            "Konsep Teknologi Informasi",
            "CTPS",
            "Matematika Dasar",
            "Bahasa Inggris",
            "Dasar Pemrograman",
            "Praktikum Dasar Pemrograman",
            "K3"
    };

    static int jumlahMK = namaMK.length;
    static double[] nilaiMK = new double[jumlahMK];

    public static String konversinilaiHuruf(double nilai) {
        if (nilai > 80)
            return "A";
        else if (nilai > 73)
            return "B+";
        else if (nilai > 65)
            return "B";
        else if (nilai > 60)
            return "C+";
        else if (nilai > 50)
            return "C";
        else if (nilai > 39)
            return "D";
        else
            return "E";
    }

    public static double bobotNilai(double nilai) {
        if (nilai > 80)
            return 4.0;
        else if (nilai > 73)
            return 3.5;
        else if (nilai > 65)
            return 3.0;
        else if (nilai > 60)
            return 2.5;
        else if (nilai > 50)
            return 2.0;
        else if (nilai > 39)
            return 1.0;
        else
            return 0.0;
    }

    public static void main(String[] args) {
        System.out.println("=====================================");
        System.out.println("Program Menghitung IP Semester");
        System.out.println("=====================================");

        for (int i = 0; i < jumlahMK; i++) {
            System.out.print("Masukkan nilai Angka untuk MK " + namaMK[i] + ": ");
            nilaiMK[i] = sc.nextDouble();
        }

        System.out.println("=====================================");
        System.out.printf("%-30s %-10s %-10s %-10s\n", "Mata Kuliah", "Nilai", "Huruf", "Bobot");
        System.out.println("=====================================");

        double totalBobot = 0;
        for (int i = 0; i < jumlahMK; i++) {
            double bobot = bobotNilai(nilaiMK[i]);
            String huruf = konversinilaiHuruf(nilaiMK[i]);
            System.out.printf("%-30s %-10.2f %-10s %-10.2f\n",
                    namaMK[i], nilaiMK[i], huruf, bobot);

            totalBobot += bobot;
        }

        System.out.println("=====================================");
        double ipSemester = totalBobot / jumlahMK;
        System.out.printf("IP Semester: %.2f\n", ipSemester);
        System.out.println("=====================================");
    }
}
```



https://github.com/dancelhal2000/jobsheet1-ASD/blob/main/array.java

4. Fungsi

```java
import java.util.Scanner;

public class nilai {
    static Scanner sc = new Scanner(System.in);

    static String[] namaMK = {
            "Pancasila",
            "Konsep Teknologi Informasi",
            "CTPS",
            "Matematika Dasar",
            "Bahasa Inggris",
            "Dasar Pemrograman",
            "Praktikum Dasar Pemrograman",
            "K3"
    };

    static int jumlahMK = namaMK.length;
    static double[] nilaiMK = new double[jumlahMK];

    public static String konversinilaiHuruf(double nilai) {
        if (nilai > 80)
            return "A";
        else if (nilai > 73)
            return "B+";
        else if (nilai > 65)
            return "B";
        else if (nilai > 60)
            return "C+";
        else if (nilai > 50)
            return "C";
        else if (nilai > 39)
            return "D";
        else
            return "E";
    }

    public static double bobotNilai(double nilai) {
        if (nilai > 80)
            return 4.0;
        else if (nilai > 73)
            return 3.5;
        else if (nilai > 65)
            return 3.0;
        else if (nilai > 60)
            return 2.5;
        else if (nilai > 50)
            return 2.0;
        else if (nilai > 39)
            return 1.0;
        else
            return 0.0;
    }

    public static void main(String[] args) {
        System.out.println("=====================================");
        System.out.println("Program Menghitung IP Semester");
        System.out.println("=====================================");

        for (int i = 0; i < jumlahMK; i++) {
            System.out.print("Masukkan nilai Angka untuk MK " + namaMK[i] + ": ");
            nilaiMK[i] = sc.nextDouble();
        }

        System.out.println("=====================================");
        System.out.printf("%-30s %-10s %-10s %-10s\n", "Mata Kuliah", "Nilai", "Huruf", "Bobot");
        System.out.println("=====================================");

        double totalBobot = 0;
        for (int i = 0; i < jumlahMK; i++) {
            double bobot = bobotNilai(nilaiMK[i]);
            String huruf = konversinilaiHuruf(nilaiMK[i]);
            System.out.printf("%-30s %-10.2f %-10s %-10.2f\n",
                    namaMK[i], nilaiMK[i], huruf, bobot);

            totalBobot += bobot;
        }

        System.out.println("=====================================");
        double ipSemester = totalBobot / jumlahMK;
        System.out.printf("IP Semester: %.2f\n", ipSemester);
        System.out.println("=====================================");
    }
}
```

```
Total Pendapatan RoyalGarden 1: 1970000
Status: Sangat Baik

Total Pendapatan RoyalGarden 2: 1660000
Status: Sangat Baik

Total Pendapatan RoyalGarden 3: 1300000
Status: perlu evaluasi

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

https://github.com/dancelhal2000/jobsheet1-ASD/blob/main/fungsi.java

Tugas

Soal 1

```java
import java.util.Scanner;

public class platnomor {
    static Scanner sc = new Scanner(System.in);

    public static void main(String[] args) {
        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.println("masukkan kode plat: ");
        char inputKode = sc.next().charAt(0);
        boolean found = false;
        for (int i = 0; i < kode.length; i++) {
            if (kode[i] == inputKode) {
                found = true;
                System.out.println("Kode plat " + inputKode + " adalah ");
                for (int j = 0; j < kota[i].length; j++) {
                    System.out.print(kota[i][j]);
                }
                System.out.println();
            }
        }
        if (!found) {
            System.out.println("Kode plat tidak ditemukan");
        }

    }
}
```

```
masukkan kode plat:
N
Kode plat N adalah
MALANG
```

https://github.com/dancelhal2000/jobsheet1-ASD/blob/main/platnomor.java

Soal 2

```java
import java.util.Scanner;

public class Jadwal {
    public static Scanner sc = new Scanner(System.in);

    public static void cariMatkul(String[][] jadwal) {
        System.out.print("masukkan mata kuliah yang ingin dicari: ");
        String matkul = sc.nextLine();
        boolean found = false;
        System.out.println("========================================================================");
        System.out.printf("%-25s %-15s %-15s %-15s\n", "Mata Kuliah", "Ruang", "Hari", "Jam");
        System.out.println("========================================================================");
        for (int i = 0; i < jadwal.length; i++) {
            if (jadwal[i][0].equalsIgnoreCase(matkul)) {
                found = true;
                System.out.printf("%-25s %-15s %-15s %-15s\n",
                        jadwal[i][0], jadwal[i][1], jadwal[i][2], jadwal[i][3]);
            }
        }
        if (!found) {
            System.out.println("Mata kuliah tidak ditemukan");
            return;
        }
    }

    public static void cariHari(String[][] jadwal) {
        System.out.print("masukkan hari yang ingin dicari: ");
        String hari = sc.next();
        boolean found = false;
        System.out.println("========================================================================");
        System.out.printf("%-25s %-15s %-15s %-15s\n", "Mata Kuliah", "Ruang", "Hari", "Jam");
        System.out.println("========================================================================");
        for (int i = 0; i < jadwal.length; i++) {
            if (jadwal[i][2].equalsIgnoreCase(hari)) {
                found = true;
                System.out.printf("%-25s %-15s %-15s %-15s\n",
                        jadwal[i][0], jadwal[i][1], jadwal[i][2], jadwal[i][3]);
            }
        }
        if (!found) {
            System.out.println("Hari tidak ditemukan");
        }
    }

    public static void outputTabel(String[][] jadwal) {
        System.out.println("========================================================================");
        System.out.printf("%-25s %-15s %-15s %-15s\n", "Mata Kuliah", "Ruang", "Hari", "Jam");
        System.out.println("========================================================================");

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

    public static String[][] inputjadwal() {
        System.out.print("Masukkan jumlah jadwal: ");
        int n = sc.nextInt();
        sc.nextLine();

        String[][] jadwal = new String[n][4];
        for (int i = 0; i < n; i++) {
            System.out.println("\nMasukkan jadwal ke-" + (i + 1));
            System.out.print("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();
        }
        return jadwal;
    }

    public static void main(String[] args) {
        String[][] jadwal = inputjadwal();
        outputTabel(jadwal);
        cariMatkul(jadwal);
        cariHari(jadwal);
    }
}

```

```
Masukkan jumlah jadwal: 4

Masukkan jadwal ke-1
Mata Kuliah : matematika
Ruang       : rt5
Hari        : senin
Jam         : 7

Masukkan jadwal ke-2
Mata Kuliah : pasd
Ruang       : rt6
Hari        : selasa
Jam         : 8

Masukkan jadwal ke-3
Mata Kuliah : inggris
Ruang       : lpy2
Hari        : rabu
Jam         : 7

Masukkan jadwal ke-4
Mata Kuliah : ASD
Ruang       : rt3
Hari        : rabu
Jam         : 9
========================================================================
Mata Kuliah             Ruang          Hari           Jam
========================================================================
matematika              rt5            senin          7
pasd                    rt6            selasa         8
inggris                 lpy2           rabu           7
ASD                     rt3            rabu           9
masukkan mata kuliah yang ingin dicari: pasd
========================================================================
Mata Kuliah             Ruang          Hari           Jam
========================================================================
pasd                    rt6            selasa         8
masukkan hari yang ingin dicari: rabu
========================================================================
Mata Kuliah             Ruang          Hari           Jam
========================================================================
inggris                 lpy2           rabu           7
ASD                     rt3            rabu           9
```

https://github.com/dancelhal2000/jobsheet1-ASD/blob/main/Jadwal.java