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LAPORAN JOBSHEET 1

1. Pemilihan
   ➢ Kode program
   ```
   package Jobsheet1;

   import java.util.Scanner;

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

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

           int tugas, kuis, uts, uas;
           System.out.print("Masukkan Nilai Tugas\t: ");
           tugas = sc.nextInt();
           System.out.print("Masukkan Nilai Kuis\t: ");
           kuis = sc.nextInt();
           System.out.print("Masukkan Nilai UTS\t: ");
           uts = sc.nextInt();
           System.out.print("Masukkan Nilai UAS\t: ");
           uas = sc.nextInt();

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

           if (tugas < 0 || tugas > 100 || kuis < 0 || kuis > 100 || uts < 0 || uts > 100 || uas < 0 ||
   uas > 100) {
               System.out.println("NILAI TIDAK VALID");
               System.out.println("====================================");
               System.out.println("====================================");
               return;
           }
   ```

```java
        double nilaiAkhir;
        String huruf = "";
        String status;

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

        if (nilaiAkhir > 80 && nilaiAkhir <= 100) {
            huruf = "A";
        } else if (nilaiAkhir > 73 && nilaiAkhir <= 80) {
            huruf = "B+";
        } else if (nilaiAkhir > 65 && nilaiAkhir <= 73) {
            huruf = "B";
        } else if (nilaiAkhir > 60 && nilaiAkhir <= 65) {
            huruf = "C+";
        } else if (nilaiAkhir > 50 && nilaiAkhir <= 60) {
            huruf = "C";
        } else if (nilaiAkhir > 39 && nilaiAkhir <= 50) {
            huruf = "D";
        } else if (nilaiAkhir >= 0 && nilaiAkhir <= 39) {
            huruf = "E";
        }

        System.out.println("Nilai AKhir\t: " + nilaiAkhir);
        System.out.println("Nilai huruf\t: " + huruf);

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

        System.out.println("================================");
        System.out.println("===============================");
        System.out.println(status);
    }
}
```
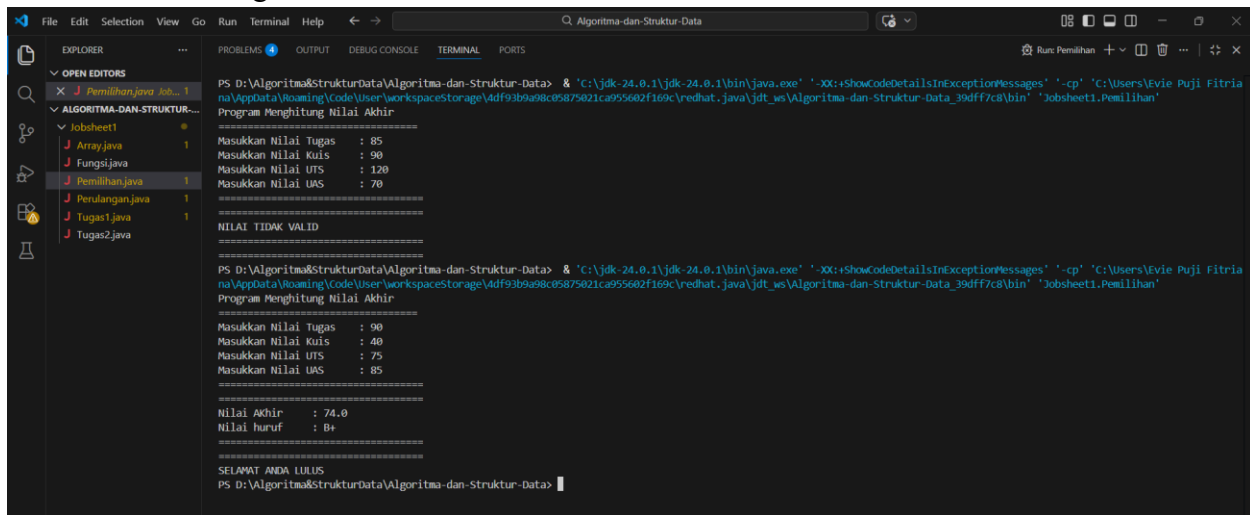
➢ Hasil Running

2. Perulangan
   ➢ Kode Program
   package Jobsheet1;

   import java.util.Scanner;

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

           String nim;
           int n;

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

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

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

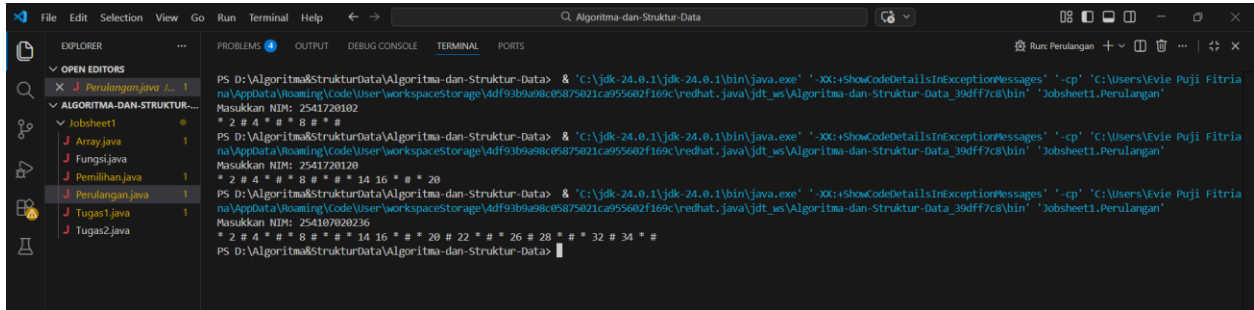   for (int i = 1; i <= n; i++) {
               if (i == 10 || i == 15) {
                   continue;

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

➢ Hasil Running

3. Array
   ➢ Kode Program

```java
package Jobsheet1;

import java.util.Scanner;

public class Array {
    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();

        String[] mk = new String[jumlahMK];
```

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

double totalBobotSKS = 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("SKS\t\t: ");
    sks[i] = sc.nextInt();

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

    if (nilaiAngka[i] > 80 && nilaiAngka[i] <= 100) {
        nilaiHuruf[i] = "A";
        nilaiSetara[i] = 4.0;
    } else if (nilaiAngka[i] > 73 && nilaiAngka[i] <= 80) {
        nilaiHuruf[i] = "B+";
        nilaiSetara[i] = 3.5;
    } else if (nilaiAngka[i] > 65 && nilaiAngka[i] <= 73) {
        nilaiHuruf[i] = "B";
        nilaiSetara[i] = 3.0;
    } else if (nilaiAngka[i] > 60 && nilaiAngka[i] <= 65) {
        nilaiHuruf[i] = "C+";
        nilaiSetara[i] = 2.5;
    } else if (nilaiAngka[i] > 50 && nilaiAngka[i] <= 60) {
        nilaiHuruf[i] = "C";
        nilaiSetara[i] = 2.0;
    } else if (nilaiAngka[i] > 39 && nilaiAngka[i] <= 50) {
        nilaiHuruf[i] = "D";
        nilaiSetara[i] = 1.0;
    } else if (nilaiAngka[i] >= 0 && nilaiAngka[i] <= 39) {
        nilaiHuruf[i] = "E";
```

```
            nilaiSetara[i] = 0.0;
        }

        totalBobotSKS += nilaiSetara[i] * sks[i];
        totalSKS += sks[i];
    }

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

    double ip = totalBobotSKS / totalSKS;
    System.out.println("=================================");
    System.out.printf("IP Semester : %.2f\n", ip);
    }
}
```

➢ Hasil Running

4. Fungsi
   ➢ Kode Program

```java
package Jobsheet1;

public class Fungsi {
    static int hitungPendapatan(int aglonema, int keladi, int alocasia, int mawar) {
        int hargaAglonema = 75000;
        int hargaKeladi = 50000;
        int hargaAlocasia = 60000;
        int hargaMawar = 10000;

        return (aglonema * hargaAglonema) +
            (keladi * hargaKeladi) +
            (alocasia * hargaAlocasia) +
            (mawar * hargaMawar);
    }

    // Fungsi menentukan status cabang
    static String statusCabang(int pendapatan) {
        if (pendapatan > 1500000) {
            return "Sangat Baik";
        } else {
            return "Perlu Evaluasi";
        }
    }

    public static void main(String[] args) {

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

        for (int i = 0; i < stok.length; i++) {
            int pendapatan = hitungPendapatan(
                    stok[i][0],
                    stok[i][1],
                    stok[i][2],
```
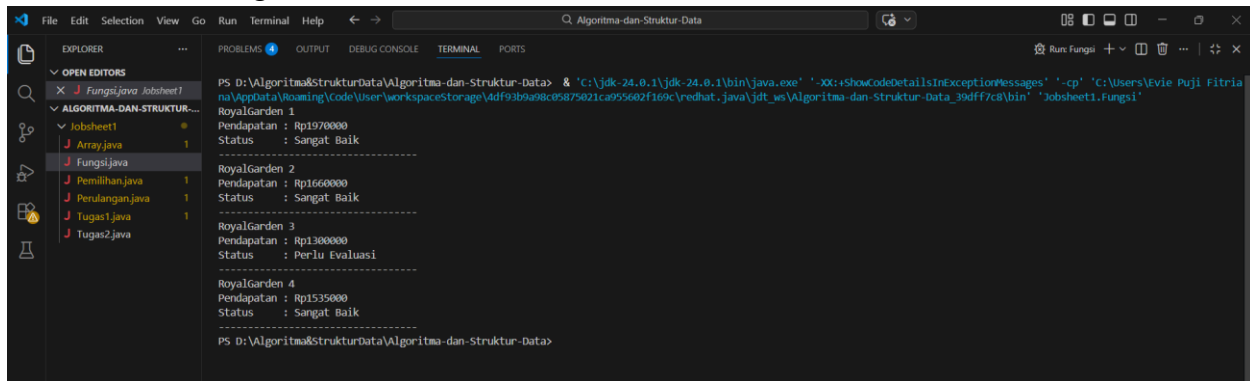
```
                    stok[i][3]);

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

➢ Hasil Running

5. Tugas 1
   ➢ Kode Program
   ```
   package Jobsheet1;

   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', 'T', 'R', 'E', 'B', 'O', 'N' },
                   { 'B', 'O', 'G', 'O', 'R' },
                   { 'P', 'E', 'K', 'A', 'L', 'O', 'N', 'G', 'A', 'N' },
   ```

```java
            { '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 nomor: ");
        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 plat tidak ditemukan");
        }
    }
}
```
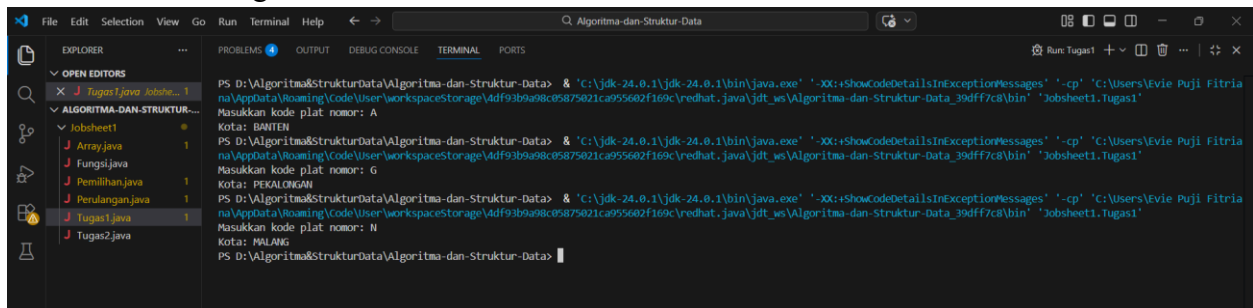
➢ Hasil Running

6. Tugas 2
   ➢ Kode Program
   package Jobsheet1;

   import java.util.Scanner;

```java
public class Tugas2 {
    static void inputJadwal(String[][] jadwal, int n, Scanner sc) {
        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 Kuliah    : ");
            jadwal[i][2] = sc.nextLine();

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

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

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

    static void tampilByHari(String[][] jadwal, String hari) {
```

```java
        boolean ditemukan = false;
        System.out.println("\nJadwal Hari " + hari);

        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][3]);
                ditemukan = true;
            }
        }

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

    static void tampilByMK(String[][] jadwal, String mk) {
        boolean ditemukan = false;

        for (int i = 0; i < jadwal.length; i++) {
            if (jadwal[i][0].equalsIgnoreCase(mk)) {
                System.out.println("\nDetail Jadwal:");
                System.out.println("Mata Kuliah : " + jadwal[i][0]);
                System.out.println("Ruang      : " + jadwal[i][1]);
                System.out.println("Hari       : " + jadwal[i][2]);
                System.out.println("Jam        : " + jadwal[i][3]);
                ditemukan = true;
            }
        }

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

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

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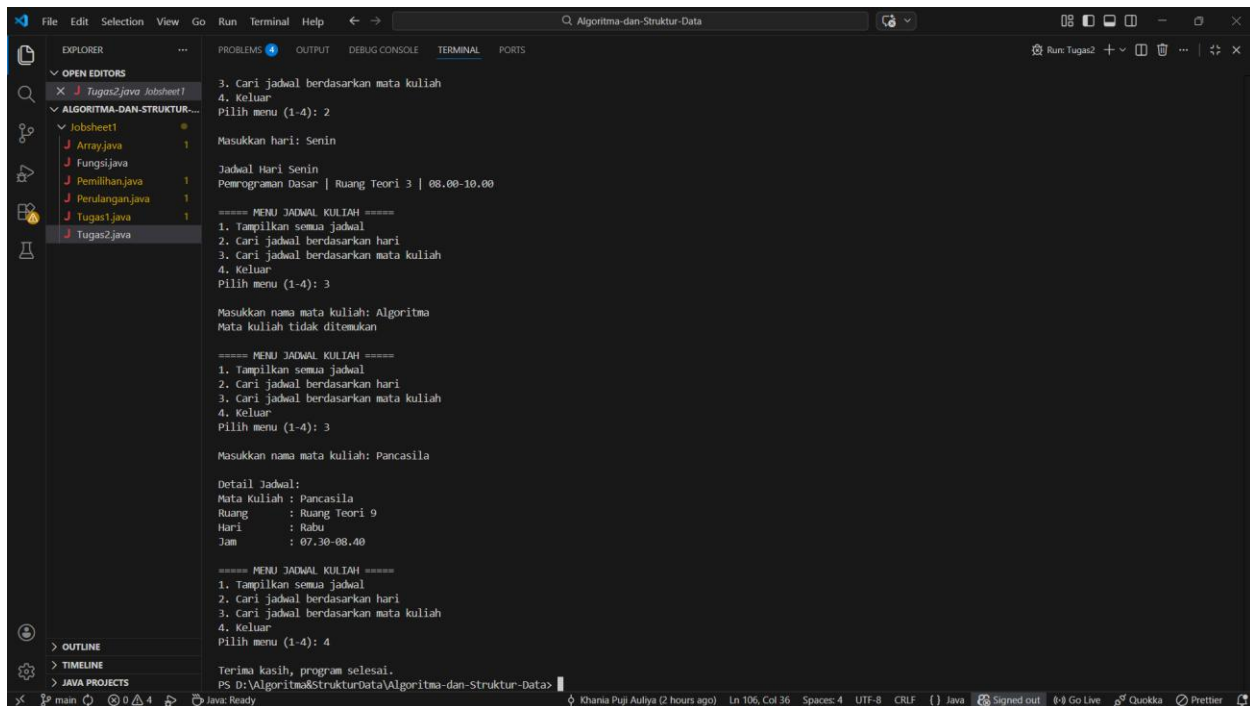
```java
        int n = sc.nextInt();
        sc.nextLine();

        String[][] jadwal = new String[n][4];
        inputJadwal(jadwal, n, sc);

        int pilihan;
        do {
            System.out.println("\n===== MENU JADWAL KULIAH =====");
            System.out.println("1. Tampilkan semua jadwal");
            System.out.println("2. Cari jadwal berdasarkan hari");
            System.out.println("3. Cari jadwal berdasarkan mata kuliah");
            System.out.println("4. Keluar");
            System.out.print("Pilih menu (1-4): ");
            pilihan = sc.nextInt();
            sc.nextLine();

            switch (pilihan) {
                case 1:
                    tampilSemuaJadwal(jadwal);
                    break;
                case 2:
                    System.out.print("\nMasukkan hari: ");
                    String hari = sc.nextLine();
                    tampilByHari(jadwal, hari);
                    break;
                case 3:
                    System.out.print("\nMasukkan nama mata kuliah: ");
                    String mk = sc.nextLine();
                    tampilByMK(jadwal, mk);
                    break;
                case 4:
                    System.out.println("\nTerima kasih, program selesai.");
                    break;
                default:
                    System.out.println("\nPilihan tidak valid!");
            }
        } while (pilihan != 4);
    }
}
```
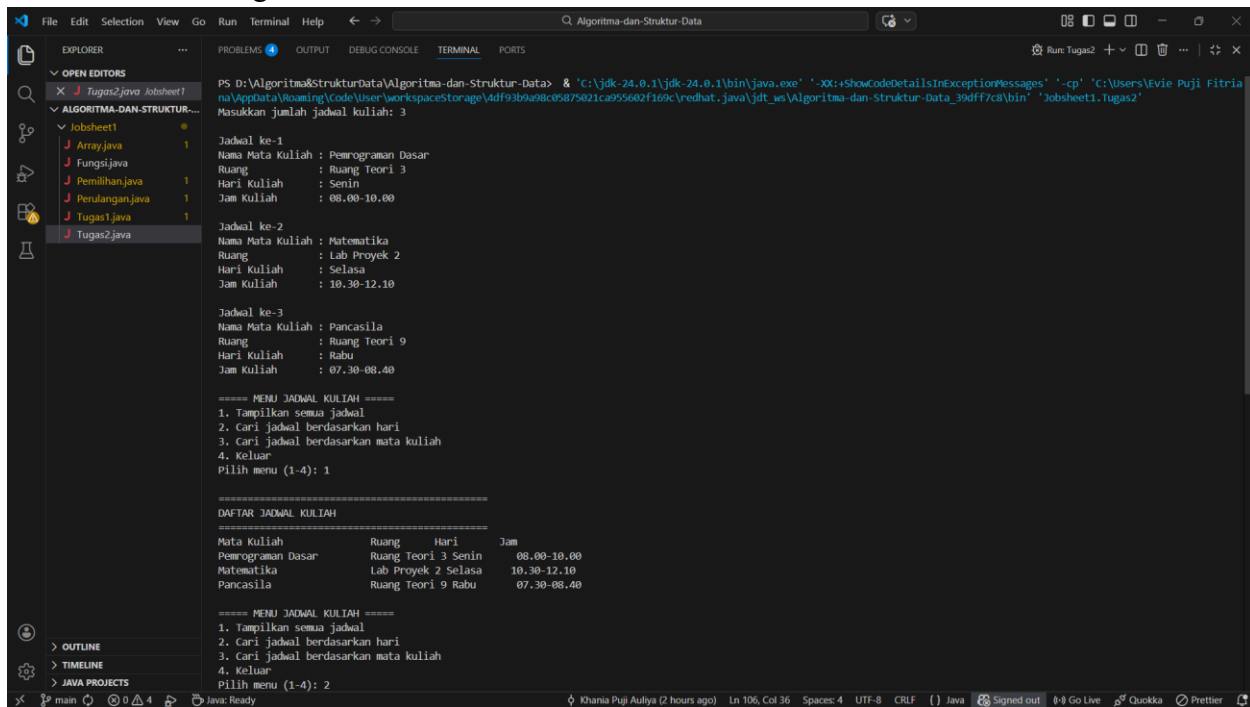
➢ Hasil Running