Laporan Praktikum Jobsheet 1

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Praktikum 1

```java
import java.util.Scanner;

public class Praktikum1 {
    Run main | Debug main | Run | Debug
    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("Masukan Nilai Tugas: ");
        double tugas = sc.nextDouble();
        System.out.print("Masukan Nilai Kuis: ");
        double kuis = sc.nextDouble();
        System.out.print("Masukan Nilai UTS: ");
        double uts = sc.nextDouble();
        System.out.print("Masukan Nilai UAS: ");
        double uas = sc.nextDouble();

        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("==============================");
        } else {
            double nilaiAkhir = (0.2 * tugas) + (0.2 * kuis) + (0.3 * uts) + (0.3 * uas);

            String huruf;
            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 {
                huruf = "E";
            }
```

```java
            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 {
            huruf = "E";
        }

        String keterangan = (huruf.equals(anObject:"D") || huruf.equals(anObject:"E")) ? "Tidak Lulus" : "Lulus";

        System.out.printf(format:"nilai akhir : %.1f\n", nilaiAkhir);
        System.out.println("Nilai Huruf : " + huruf);
        System.out.println(x:"==============================");
        System.out.println(x:"==============================");

        if (keterangan.equals(anObject:"Lulus")) {
            System.out.println(x:"SELAMAT ANDA LULUS");
        } else {
            System.out.println(x:"ANDA TIDAK LULUS");
        }
    }
}
}
```

Hasil Outputnya 1 :

```
Program Menghitung Nilai Akhir
==============================
Masukan Nilai Tugas: 90
Masukan Nilai Kuis: 40
Masukan Nilai UTS: 75
Masukan Nilai UAS: 85
==============================
==============================
nilai akhir : 74,0
Nilai Huruf : B+
==============================
==============================
SELAMAT ANDA LULUS
PS C:\Users\Lenovo\Downloads\PRAKALSD-SMT.2\Praktikum-AS
```

Praktikum 2

Praktikum2.java 2 | Praktikum3.java 1 | Praktikum4.java 1 | Tugas1.java 1

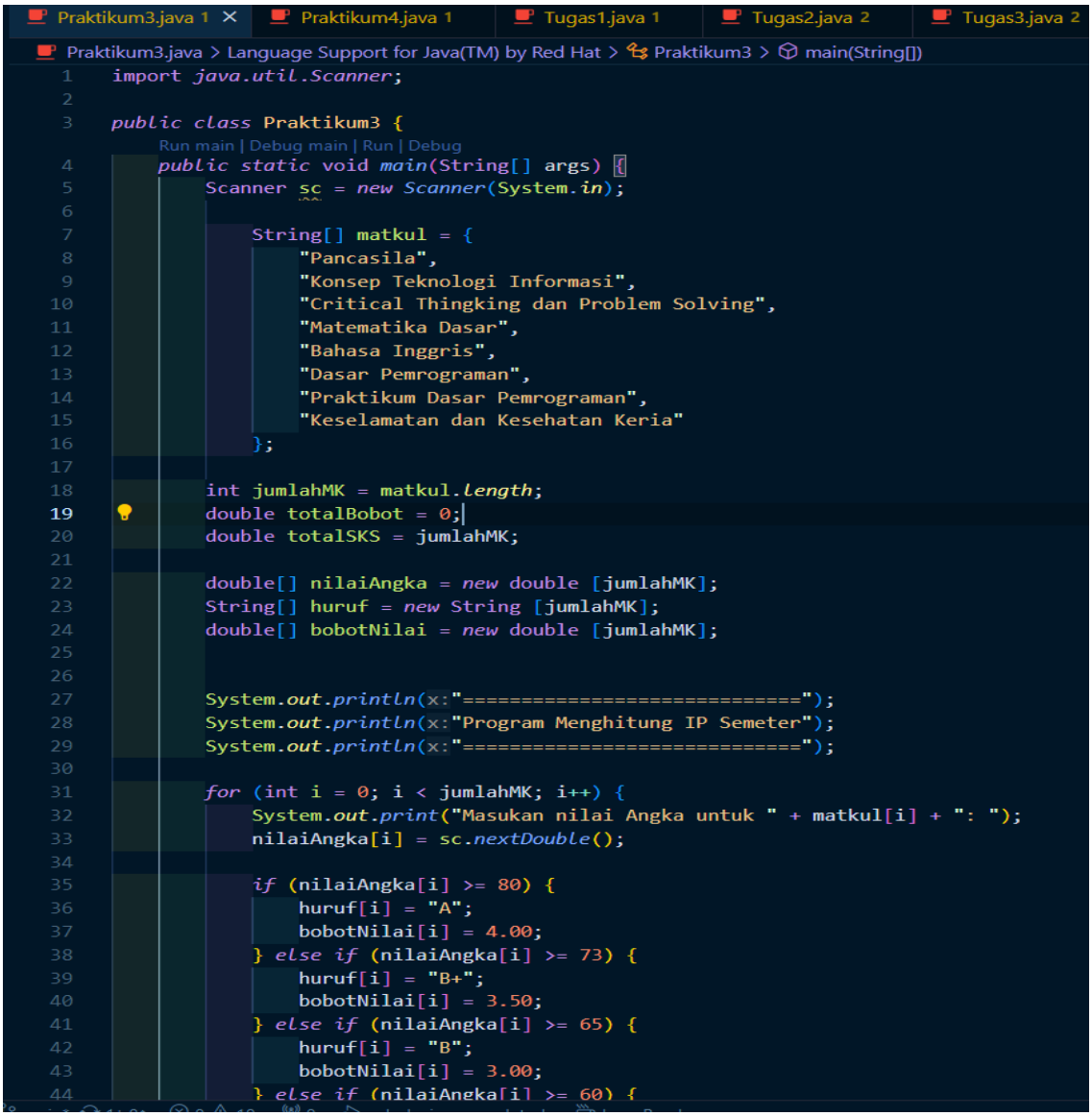
Praktikum2.java > Language Support for Java(TM) by Red Hat > Praktikum2 > main(String[])

```java
import java.util.Scanner;

public class Praktikum2 {
    Run main | Debug main | Run | Debug
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        long nim = 0;
        System.out.print(s:"Masukan Nim : ");
        nim = input.nextLong();

        long n = nim % 100;

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

        System.out.println(x:"==========================");
        System.out.println("n : " + n);

        for (int i = 1; i <= n; i++) {
            if (i == 6 || i == 10) {
                continue;
            }
            if (i % 2 == 0) {
                System.out.print(i + " ");
            } else {
                System.out.print(s:"* ");
            }
        }
    }
}
```

Hasil Outputnya 2 :

```
ceptionMessages' '-cp' 'C:\Users\Lenovo
Masukan Nim : 2341720102
==========================
n : 12
* 2 * 4 * * 8 * * 12
PS C:\Users\Lenovo\Downloads\PRAKALSD-S
```

Praktikum 3



```java
import java.util.Scanner;

public class Praktikum3 {
    Run main | Debug main | Run | Debug
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

            String[] matkul = {
                "Pancasila",
                "Konsep Teknologi Informasi",
                "Critical Thingking dan Problem Solving",
                "Matematika Dasar",
                "Bahasa Inggris",
                "Dasar Pemrograman",
                "Praktikum Dasar Pemrograman",
                "Keselamatan dan Kesehatan Keria"
            };

            int jumlahMK = matkul.length;
            double totalBobot = 0;
            double totalSKS = jumlahMK;

            double[] nilaiAngka = new double [jumlahMK];
            String[] huruf = new String [jumlahMK];
            double[] bobotNilai = new double [jumlahMK];


            System.out.println(x:"==============================");
            System.out.println(x:"Program Menghitung IP Semeter");
            System.out.println(x:"==============================");

            for (int i = 0; i < jumlahMK; i++) {
                System.out.print("Masukan nilai Angka untuk " + matkul[i] + ": ");
                nilaiAngka[i] = sc.nextDouble();

                if (nilaiAngka[i] >= 80) {
                    huruf[i] = "A";
                    bobotNilai[i] = 4.00;
                } else if (nilaiAngka[i] >= 73) {
                    huruf[i] = "B+";
                    bobotNilai[i] = 3.50;
                } else if (nilaiAngka[i] >= 65) {
                    huruf[i] = "B";
                    bobotNilai[i] = 3.00;
                } else if (nilaiAngka[i] >= 60) {
                    bobotNilai[i] = 3.00;
                } else if (nilaiAngka[i] >= 60) {
                    huruf[i] = "C+";
                    bobotNilai[i] = 2.50;
                } else if (nilaiAngka[i] >= 50){
                    huruf[i] = "C";
                    bobotNilai[i] = 2.00;
                } else if (nilaiAngka[i] >= 39) {
                    huruf[i] = "D";
                    bobotNilai[i] = 1.00;
                } else {
                    huruf[i] = "E";
                    bobotNilai[i] = 0.00;
                }
                totalBobot += bobotNilai[i];
            }

            double IPS = totalBobot / totalSKS;

            System.out.println(x:"============================");
            System.out.println(x:"Hasil konversi Nilai");
            System.out.println(x:"============================");
            System.out.printf(format:"%-40s %-10s %-10s %-10s%n",...args:"MK", "Nilai Angka", "Nilai Huruf", "Bobot Nilai");

            for (int i = 0; i < jumlahMK; i++) {
                System.out.printf(format:"%-40s %-10.2f %-10s %-10.2f%n", matkul[i], nilaiAngka[i], huruf[i], bobotNilai[i]);
            }
            System.out.println(x:"============================");
            System.out.printf(format:"IP : %.2f%n", IPS);
        }
    }
```

Hasil Outputnya 3 :

```
============================
Hasil konversi Nilai
============================
MK                                  Nilai Angka Nilai Huruf Bobot Nilai
Pancasila                           80,00       A           4,00
Konsep Teknologi Informasi          90,00       A           4,00
Critical Thingking dan Problem Solving  95,00       A           4,00
Matematika Dasar                    50,00       C           2,00
Bahasa Inggris                      58,00       C           2,00
Dasar Pemrograman                   85,00       A           4,00
Praktikum Dasar Pemrograman         74,00       B+          3,50
Keselamatan dan Kesehatan Keria     78,00       B+          3,50
============================
IP : 3,38
PS C:\Users\Lenovo\Downloads\PRAKALSD-SMT.2\Praktikum-ASD>
```

Praktikum 4

Praktikum4.java 1 | Tugas1.java 1 | Tugas2.java 2 | Tugas3.java 2

Praktikum4.java > Language Support for Java(TM) by Red Hat > Praktikum4 > kurangiStock(int[][], int[])

```java
public class Praktikum4 {
    Run main | Debug main | Run | Debug
    public static void main(String[] args) {
        int[][] stockBunga = {
                { 10, 5, 15, 7 },
                { 6, 11, 9, 12 },
                { 2, 10, 10, 5 },
                { 5, 7, 12, 9 }
        };

        int[] harga = { 75000, 50000, 60000, 10000 };
        String[] bunga = { "Aglonema", "Keladi", "Alocasia", "Mawar" };
        int[] bungaMati = { -1, -2, 0, -5 };

        pendapatan(stockBunga, harga);
        totalStock(stockBunga, bunga);
        kurangiStock(stockBunga, bungaMati);
    }

    public static void pendapatan(int[][] stockBunga, int[] harga) {
        System.out.println(x:"Pendapatan Tiap Cabang Jika Semua Bunga Terjual:");
        for (int i = 0; i < stockBunga.length; i++) {
            int totalPendapatan = 0;
            for (int j = 0; j < stockBunga[i].length; j++) {
                totalPendapatan += stockBunga[i][j] * harga[j];
            }
            System.out.println("RoyalGarden " + (i + 1) + ": Rp " + totalPendapatan);
        }
        System.out.println(x:"========================");
        System.out.println();
    }

    public static void totalStock(int[][] stockBunga, String[] bunga) {
        System.out.println(x:"Total Stok Setiap Jenis Bunga:");
        int[] totalStock = new int[bunga.length];
        for (int j = 0; j < bunga.length; j++) {
            for (int i = 0; i < stockBunga.length; i++) {
                totalStock[j] += stockBunga[i][j];
            }
            System.out.println(bunga[j] + ": " + totalStock[j]);
        }
        System.out.println(x:"========================");
        System.out.println();
    }
```

```java
    }

    public static void kurangiStock(int[][] stockBunga, int[] bungaMati) {
        System.out.println(x:"Stok Setelah Dikurangi Karena Bunga Mati:");
        for (int i = 0; i < stockBunga.length; i++) {
            System.out.print("RoyalGarden " + (i + 1) + ": ");
            for (int j = 0; j < stockBunga[i].length; j++) {
                stockBunga[i][j] += bungaMati[j];
                System.out.print(stockBunga[i][j] + " ");
            }
            System.out.println();
        }
        System.out.println(x:"========================");
    }
}
```

Hasil Outputnya 4 :

```
Pendapatan Tiap Cabang Jika Semua Bunga Terjual:
RoyalGarden 1: Rp 1970000
RoyalGarden 2: Rp 1660000
RoyalGarden 3: Rp 1300000
RoyalGarden 4: Rp 1535000
=========================

Total Stok Setiap Jenis Bunga:
Aglonema: 23
Keladi: 33
Alocasia: 46
Mawar: 33
=========================

Stok Setelah Dikurangi Karena Bunga Mati:
RoyalGarden 1: 9 3 15 2
RoyalGarden 2: 5 9 9 7
RoyalGarden 3: 1 8 10 0
RoyalGarden 4: 4 5 12 4
=========================
PS C:\Users\Lenovo\Downloads\PRAKALSD-SMT.2\Praktikum-ASD>
```

Tugas 1

Tugas1.java 1 | Tugas2.java 2 | Tugas3.java 2

Tugas1.java > Language Support for Java(TM) by Red Hat > Tugas1 > main(String[])

```java
import java.util.Scanner;

public class Tugas1 {
Run main | Debug main | Run | Debug
public static void main(String[] args) {
        char[] kode = {'A', 'B', 'D', 'E', 'F', 'G', 'H', 'L', 'N', 'T'};
        String[] kota = {
            "BANTEN",
            "JAKARTA",
            "BANDUNG",
            "CIREBON",
            "BOGOR",
            "PEKALONGAN",
            "SEMARANG",
            "SURABAYA",
            "MALANG",
            "TEGAL"
        };
        Scanner sc = new Scanner(System.in);
        System.out.print(s:"Masukkan kode plat nomor: ");
        char inputKode = sc.next().toUpperCase().charAt(index:0);

        boolean ketemu = false;
        for (int i = 0; i < kode.length; i++) {
            if (kode[i] == inputKode) {
                System.out.println("Kota dari plat " + inputKode + " adalah " + kota[i]);
                ketemu = true;
                break;
            }
        }
        if (!ketemu) {
            System.out.println(x:"Kode plat tidak ditemukan");
        }
    }
}
```

Hasil Outputnya 1 :

```
Masukkan kode plat nomor: h
Kota dari plat H adalah SEMARANG
PS C:\Users\Lenovo\Downloads\PRAKALSD-SMT.2\Praktikum-ASD> javac Tugas1.java
PS C:\Users\Lenovo\Downloads\PRAKALSD-SMT.2\Praktikum-ASD> java Tugas1
Masukkan kode plat nomor: n
Kota dari plat N adalah MALANG
```

Tugas 2

Tugas2.java 2 | Tugas3.java 2

Tugas2.java > Language Support for Java(TM) by Red Hat > Tugas2 > keliling(double)

```java
import java.util.Scanner;

public class Tugas2 {
    public static double volume(double sisi) {
        return sisi * sisi * sisi;
    }

    public static double luasPermukaan(double sisi) {
        return 6 * (sisi * sisi);
    }

    public static double keliling(double sisi) {
        return 12 * sisi;
    }

    public static void menu() {
        System.out.println(x:"\n---> Perhitungan Kubus <---");
        System.out.println(x:"1. Hitung Volume");
        System.out.println(x:"2. Hitung Luas Permukaan");
        System.out.println(x:"3. Hitung Keliling");
        System.out.println(x:"4. Keluar");
        System.out.print(s:"Pilih menu: ");
    }

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

        menu();

        int pilihan = sc.nextInt();

        System.out.print(s:"Masukkan panjang sisi kubus: ");
        double sisi = sc.nextDouble();

        switch (pilihan) {
            case 1:
                System.out.println("Volume Kubus: " + volume(sisi));
                break;
            case 2:
                System.out.println("Luas Permukaan Kubus: " + luasPermukaan(sisi));
                break;
            case 3:
                System.out.println("Keliling Kubus: " + keliling(sisi));
                break;
            default:
                System.out.println(x:"Pilihan tidak valid");
        }
    }
}
```

Hasil outputnya 2 :

```
---> Perhitungan Kubus <---
1. Hitung Volume
2. Hitung Luas Permukaan
3. Hitung Keliling
4. Keluar
Pilih menu: 2
Masukkan panjang sisi kubus: 5
Luas Permukaan Kubus: 150.0
PS C:\Users\Lenovo\Downloads\PRAKALSD-SMT.2\Praktikum-ASD> java Tugas2

---> Perhitungan Kubus <---
1. Hitung Volume
2. Hitung Luas Permukaan
3. Hitung Keliling
4. Keluar
Pilih menu: 3
Masukkan panjang sisi kubus: 5
Keliling Kubus: 60.0
```

Tugas 3

Tugas3.java 2

Tugas3.java > Language Support for Java(TM) by Red Hat > Tugas3

```java
import java.util.Scanner;

public class Tugas3 {
    static String[] matkul;
    static int[] sks;
    static int[] semester;
    static String[] hariKuliah;
    static int jumlahMatkul;

    public static void tambahData(Scanner sc) {
        System.out.print(s:"Masukkan jumlah mata kuliah: ");
        jumlahMatkul = sc.nextInt();
        sc.nextLine();

        matkul = new String[jumlahMatkul];
        sks = new int[jumlahMatkul];
        semester = new int[jumlahMatkul];
        hariKuliah = new String[jumlahMatkul];

        for (int i = 0; i < jumlahMatkul; i++) {
            System.out.println("\nMasukkan data mata kuliah ke-" + (i + 1));
            System.out.print(s:"Nama Mata Kuliah: ");
            matkul[i] = sc.nextLine();
            System.out.print(s:"Jumlah SKS: ");
            sks[i] = sc.nextInt();
            System.out.print(s:"Semester: ");
            semester[i] = sc.nextInt();
            sc.nextLine();
            System.out.print(s:"Hari Kuliah: ");
            hariKuliah[i] = sc.nextLine();
        }
    }

    public static void tampilkanSemuaJadwal() {
        System.out.println(x:"\n=== Jadwal Kuliah ===");
        for (int i = 0; i < jumlahMatkul; i++) {
            System.out.println(matkul[i] + " | SKS: " + sks[i] + " | Semester: " + semester[i] + " | Hari: " + hariKuliah[i]);
        }
    }

    public static void tampilkanJadwalHari(Scanner sc) {
        System.out.print(s:"Masukkan hari kuliah yang ingin ditampilkan: ");
        String hariCari = sc.nextLine();
        System.out.println("\n=== Jadwal Kuliah Hari " + hariCari + " ===");
```

Tugas3.java 2

Tugas3.java > Language Support for Java(TM) by Red Hat > Tugas3

```
3   public class Tugas3 {
41      public static void tampilkanJadwalHari(Scanner sc) {
43          String hariCari = sc.nextLine();
44          System.out.println("\n=== Jadwal Kuliah Hari " + hariCari + " ===");
45
46          boolean ditemukan = false;
47          for (int i = 0; i < jumlahMatkul; i++) {
48              if (hariKuliah[i].equalsIgnoreCase(hariCari)) {
49                  System.out.println(matkul[i] + " | SKS: " + sks[i] + " | Semester: " + semester[i]);
50                  ditemukan = true;
51              }
52          }
53          if (!ditemukan) {
54              System.out.println("Tidak ada mata kuliah pada hari " + hariCari);
55          }
56      }
57
58      public static void tampilkanJadwalSemester(Scanner sc) {
59          System.out.print(s:"Masukkan semester yang ingin ditampilkan: ");
60          int semesterCari = sc.nextInt();
61          sc.nextLine();
62          System.out.println("\n=== Jadwal Kuliah Semester " + semesterCari + " ===");
63
64          boolean ditemukan = false;
65          for (int i = 0; i < jumlahMatkul; i++) {
66              if (semester[i] == semesterCari) {
67                  System.out.println(matkul[i] + " | SKS: " + sks[i] + " | Hari: " + hariKuliah[i]);
68                  ditemukan = true;
69              }
70          }
71          if (!ditemukan) {
72              System.out.println("Tidak ada mata kuliah pada semester " + semesterCari);
73          }
74      }
75
76      public static void cariMataKuliah(Scanner sc) {
77          System.out.print(s:"Masukkan nama mata kuliah yang ingin dicari: ");
78          String namaCari = sc.nextLine();
79          System.out.println(x:"\n=== Hasil Pencarian Mata Kuliah ===");
80
81          boolean ditemukan = false;
82          for (int i = 0; i < jumlahMatkul; i++) {
83              if (matkul[i].equalsIgnoreCase(namaCari)) {
84                  System.out.println(matkul[i] + " | SKS: " + sks[i] + " | Semester: " + semester[i] + " | Hari: " + hariKuliah[i]);
```

Tugas3.java 2

Tugas3.java > Language Support for Java(TM) by Red Hat > Tugas3

```
3   public class Tugas3 {
76      public static void cariMataKuliah(Scanner sc) {
84                  System.out.println(matkul[i] + " | SKS: " + sks[i] + " | Semester: " + semester[i] + " | Hari: " + hariKuliah[
85                  ditemukan = true;
86              }
87          }
88          if (!ditemukan) {
89              System.out.println("Mata kuliah '" + namaCari + "' tidak ditemukan.");
90          }
91      }
92
93      public static void tampilkanMenu(Scanner sc) {
94          while (true) {
95              System.out.println(x:"\n=== MENU JADWAL KULIAH ===");
96              System.out.println(x:"1. Tambah Data Mata Kuliah");
97              System.out.println(x:"2. Tampilkan Semua Jadwal");
98              System.out.println(x:"3. Tampilkan Jadwal Berdasarkan Hari");
99              System.out.println(x:"4. Tampilkan Jadwal Berdasarkan Semester");
100             System.out.println(x:"5. Cari Mata Kuliah");
101             System.out.println(x:"6. Keluar");
102             System.out.print(s:"Pilih menu: ");
103             int pilihan = sc.nextInt();
104             sc.nextLine();
105
106             switch (pilihan) {
107                 case 1:
108                     tambahData(sc);
109                     break;
110                 case 2:
111                     tampilkanSemuaJadwal();
112                     break;
113                 case 3:
114                     tampilkanJadwalHari(sc);
115                     break;
116                 case 4:
117                     tampilkanJadwalSemester(sc);
118                     break;
119                 case 5:
120                     cariMataKuliah(sc);
121                     break;
122                 case 6:
123                     System.out.println(x:"Program selesai");
124                     return;
125                 default:
```

```
124                 return;
125             default:
126                 System.out.println(x:"Pilihan tidak valid! Silahkan coba lagi.");
127             }
128         }
129     }
130
    Run main | Debug main | Run | Debug
131 public static void main(String[] args) {
132     Scanner sc = new Scanner(System.in);
133     tampilkanMenu(sc);
134     sc.close();
135 }
136 }
```

Hasil Outputnya 3 :

```
Masukkan data mata kuliah ke-1
Nama Mata Kuliah: Kewarganegaraan
Jumlah SKS: 2
Semester: 2
Hari Kuliah: rabu

Masukkan data mata kuliah ke-2
Nama Mata Kuliah: Analisis Bisnis
Jumlah SKS: 2
Semester: 2
Hari Kuliah: Kamis

=== MENU JADWAL KULIAH ===
1. Tambah Data Mata Kuliah
2. Tampilkan Semua Jadwal
3. Tampilkan Jadwal Berdasarkan Hari
4. Tampilkan Jadwal Berdasarkan Semester
5. Cari Mata Kuliah
6. Keluar
Pilih menu: 2

=== Jadwal Kuliah ===
Kewarganegaraan | SKS: 2 | Semester: 2 | Hari: rabu
Analisis Bisnis | SKS: 2 | Semester: 2 | Hari: Kamis
```