

JOBSHEET 1
POLITEKNIK NEGERI MALANG TAHUN
2025/2026

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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

```
1  import java.util.Scanner;
2
3  public class hitungnilai {
4      public static void main(String[] args) {
5          Scanner sc = new Scanner(System.in);
6
7          System.out.println("program menghitung Nilai Akhir");
8          System.out.println("=====");
9
10         System.out.print("Masukkan nilai tugas: ");
11         int tugas = sc.nextInt();
12         System.out.print("Masukkan nilai kuis : ");
13         int kuis = sc.nextInt();
14         System.out.print("Masukkan nilai uts : ");
15         int uts = sc.nextInt();
16         System.out.print("Masukkan nilai uas : ");
17         int uas = sc.nextInt();
18
19         double total = (tugas * 0.2) + (kuis * 0.2) + (uts * 0.3) + (uas * 0.3);
20
21         System.out.println("=====");
22
23         if (total < 0 || total > 100) {
24             System.out.println("Nilai total tidak valid");
25         } else {
26             String nilaiHuruf;
27             if (total > 80) {
28                 nilaiHuruf = "A";
29             } else if (total > 73) {
30                 nilaiHuruf = "B+";
31             } else if (total > 65) {
32                 nilaiHuruf = "B";
33             } else if (total > 60) {
34                 nilaiHuruf = "C+";
35             } else if (total > 50) {
36                 nilaiHuruf = "C";
37             } else if (total > 39) {
38                 nilaiHuruf = "D";
39             } else {
40                 nilaiHuruf = "E";
41             }
42
43             System.out.printf("Nilai total: %.2f\n", total);
44             System.out.println("Nilai huruf: " + nilaiHuruf);
45             System.out.println("=====");
46
47             System.out.print("Status Kelulusan: ");
48             if (nilaiHuruf.equals("E") || nilaiHuruf.equals("D")) {
49                 System.out.println("Tidak Lulus");
50             } else {
51                 System.out.println("Lulus");
52             }
53         }
54     }
55 }
```

<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

```
1  import java.util.Scanner;
2
3  public class program2 {
4      static Scanner sc = new Scanner(System.in);
5
6      Run | Debug
7      public static void main(String[] args) {
8          System.out.print("Input nim : ");
9          long nim = sc.nextLong();
10         int n = (int) (nim % 100);
11         System.out.println("n = " + n);
12         if (n < 10) {
13             n = n + 10;
14         }
15         for (int i = 1; i <= n; i++) {
16             if (i == 10 || i == 15) {
17                 continue;
18             } else if (i % 3 == 0) {
19                 System.out.print("#");
20             } else if (i % 2 != 0) {
21                 System.out.print("*");
22             } else {
23                 System.out.print(i);
24             }
25             System.out.print(" ");
26         }
27     }
```

<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

```
1 import java.util.Scanner;
2
3 public class nilai {
4     static Scanner sc = new Scanner(System.in);
5
6     static String[] namaMK = {
7         "Pancasila",
8         "Konsep Teknologi Informasi",
9         "CTPS",
10        "Matematika Dasar",
11        "Bahasa Inggris",
12        "Dasar Pemrograman",
13        "Praktikum Dasar Pemrograman",
14        "K3"
15    };
16
17    static int jumlahMK = namaMK.length;
18    static double[] nilaiMK = new double[jumlahMK];
19
20    public static String konversinilaiHuruf(double nilai) {
21        if (nilai > 80)
22            return "A";
23        else if (nilai > 73)
24            return "B+";
25        else if (nilai > 65)
26            return "B";
27        else if (nilai > 60)
28            return "C+";
29        else if (nilai > 50)
30            return "C";
31        else if (nilai > 39)
32            return "D";
33        else
34            return "E";
35    }
36
37    public static double bobotNilai(double nilai) {
38        if (nilai > 80)
39            return 4.0;
40        else if (nilai > 73)
41            return 3.5;
42        else if (nilai > 65)
43            return 3.0;
44        else if (nilai > 60)
45            return 2.5;
46        else if (nilai > 50)
47            return 2.0;
48        else if (nilai > 39)
49            return 1.0;
50        else
51            return 0.0;
52    }
53
54    public static void main(String[] args) {
55        System.out.println("=====");
56        System.out.println("Program Menghitung IP Semester");
57        System.out.println("=====");
58
59        for (int i = 0; i < jumlahMK; i++) {
60            System.out.print("Masukkan nilai Angka untuk MK " + namaMK[i] + ": ");
61            nilaiMK[i] = sc.nextDouble();
62        }
63
64        System.out.println("=====");
65        System.out.printf("%-30s %-10s %-10s %-10s\n", "Mata Kuliah", "Nilai", "Huruf", "Bobot");
66        System.out.println("=====");
67
68        double totalBobot = 0;
69        for (int i = 0; i < jumlahMK; i++) {
70            double bobot = bobotNilai(nilaiMK[i]);
71            String huruf = konversinilaiHuruf(nilaiMK[i]);
72            System.out.printf("%-30s %-10.2f %-10s %-10.2f\n",
73                namaMK[i], nilaiMK[i], huruf, bobot);
74
75            totalBobot += bobot;
76        }
77
78        System.out.println("=====");
79        double ipSemester = totalBobot / jumlahMK;
80        System.out.printf("IP Semester: %.2f\n", ipSemester);
81        System.out.println("=====");
82    }
83 }
```

```

=====
Program Menghitung IP Semester
=====
Masukkan nilai Angka untuk MK Pancasila: 88
Masukkan nilai Angka untuk MK Konsep Teknologi Informasi: 78
Masukkan nilai Angka untuk MK CTPS: 69
Masukkan nilai Angka untuk MK Matematika Dasar: 95
Masukkan nilai Angka untuk MK Bahasa Inggris: 44
Masukkan nilai Angka untuk MK Dasar Pemrograman: 55
Masukkan nilai Angka untuk MK Praktikum Dasar Pemrograman: 67
Masukkan nilai Angka untuk MK K3: 78
=====
Mata Kuliah                Nilai      Huruf      Bobot
=====
Pancasila                  88.00      A          4.00
Konsep Teknologi Informasi  78.00      B+         3.50
CTPS                       69.00      B          3.00
Matematika Dasar           95.00      A          4.00
Bahasa Inggris              44.00      D          1.00
Dasar Pemrograman          55.00      C          2.00
Praktikum Dasar Pemrograman 67.00      B          3.00
K3                          78.00      B+         3.50
=====
IP Semester: 3.00
=====

```

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

4. Fungsi

```
1  import java.util.Scanner;
2
3  public class nilai {
4      static Scanner sc = new Scanner(System.in);
5
6      static String[] namaMK = {
7          "Pancasila",
8          "Konsep Teknologi Informasi",
9          "CTPS",
10         "Matematika Dasar",
11         "Bahasa Inggris",
12         "Dasar Pemrograman",
13         "Praktikum Dasar Pemrograman",
14         "K3"
15     };
16
17     static int jumlahMK = namaMK.length;
18     static double[] nilaiMK = new double[jumlahMK];
19
20     public static String konversinilaiHuruf(double nilai) {
21         if (nilai > 80)
22             return "A";
23         else if (nilai > 73)
24             return "B+";
25         else if (nilai > 65)
26             return "B";
27         else if (nilai > 60)
28             return "C+";
29         else if (nilai > 50)
30             return "C";
31         else if (nilai > 39)
32             return "D";
33         else
34             return "E";
35     }
36
37     public static double bobotNilai(double nilai) {
38         if (nilai > 80)
39             return 4.0;
40         else if (nilai > 73)
41             return 3.5;
42         else if (nilai > 65)
43             return 3.0;
44         else if (nilai > 60)
45             return 2.5;
46         else if (nilai > 50)
47             return 2.0;
48         else if (nilai > 39)
49             return 1.0;
50         else
51             return 0.0;
52     }
53
54     public static void main(String[] args) {
55         System.out.println("=====");
56         System.out.println("Program Menghitung IP Semester");
57         System.out.println("=====");
58
59         for (int i = 0; i < jumlahMK; i++) {
60             System.out.print("Masukkan nilai Angka untuk MK " + namaMK[i] + ": ");
61             nilaiMK[i] = sc.nextDouble();
62         }
63
64         System.out.println("=====");
65         System.out.printf("%-30s %-10s %-10s %-10s\n", "Mata Kuliah", "Nilai", "Huruf", "Bobot");
66         System.out.println("=====");
67
68         double totalBobot = 0;
69         for (int i = 0; i < jumlahMK; i++) {
70             double bobot = bobotNilai(nilaiMK[i]);
71             String huruf = konversinilaiHuruf(nilaiMK[i]);
72             System.out.printf("%-30s %-10.2f %-10s %-10.2f\n",
73                 namaMK[i], nilaiMK[i], huruf, bobot);
74
75             totalBobot += bobot;
76         }
77
78         System.out.println("=====");
79         double ipSemester = totalBobot / jumlahMK;
80         System.out.printf("IP Semester: %.2f\n", ipSemester);
81         System.out.println("=====");
82     }
83 }
```

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

```
1  import java.util.Scanner;
2
3  public class platnomor {
4      static Scanner sc = new Scanner(System.in);
5
6      public static void main(String[] args) {
7          char kode[] = { 'A', 'B', 'D', 'E', 'F', 'G', 'H', 'L', 'N', 'T' };
8          char kota[][] = { { 'B', 'A', 'N', 'T', 'E', 'N' },
9                             { 'J', 'A', 'K', 'A', 'R', 'T', 'A' },
10                            { 'B', 'A', 'N', 'D', 'U', 'N', 'G' },
11                            { 'C', 'I', 'R', 'E', 'B', 'O', 'N' },
12                            { 'B', 'O', 'G', 'O', 'R' },
13                            { 'P', 'E', 'K', 'A', 'L', 'O', 'N', 'G', 'A', 'N' },
14                            { 'S', 'E', 'M', 'A', 'R', 'A', 'N', 'G' },
15                            { 'S', 'U', 'R', 'A', 'B', 'A', 'Y', 'A' },
16                            { 'M', 'A', 'L', 'A', 'N', 'G' },
17                            { 'T', 'E', 'G', 'A', 'L' },
18                        };
19          System.out.println("masukkan kode plat: ");
20          char inputKode = sc.next().charAt(0);
21          boolean found = false;
22          for (int i = 0; i < kode.length; i++) {
23              if (kode[i] == inputKode) {
24                  found = true;
25                  System.out.println("Kode plat " + inputKode + " adalah ");
26                  for (int j = 0; j < kota[i].length; j++) {
27                      System.out.print(kota[i][j]);
28                  }
29                  System.out.println();
30              }
31          }
32          if (!found) {
33              System.out.println("Kode plat tidak ditemukan");
34          }
35      }
36  }
37 }
38
```

masukkan kode plat:

N

Kode plat N adalah

MALANG

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

Soal 2

```
1 import java.util.Scanner;
2
3 public class Jadwal {
4     public static Scanner sc = new Scanner(System.in);
5
6     public static void cariMatkul(String[][] jadwal) {
7         System.out.print("masukkan mata kuliah yang ingin dicari: ");
8         String matkul = sc.nextLine();
9         boolean found = false;
10        System.out.println("=====");
11        System.out.printf("%-25s %-15s %-15s %-15s\n", "Mata Kuliah", "Ruang", "Hari", "Jam");
12        System.out.println("=====");
13        for (int i = 0; i < jadwal.length; i++) {
14            if (jadwal[i][0].equalsIgnoreCase(matkul)) {
15                found = true;
16                System.out.printf("%-25s %-15s %-15s %-15s\n",
17                    jadwal[i][0], jadwal[i][1], jadwal[i][2], jadwal[i][3]);
18            }
19        }
20        if (!found) {
21            System.out.println("Mata kuliah tidak ditemukan");
22            return;
23        }
24    }
25
26    public static void cariHari(String[][] jadwal) {
27        System.out.print("masukkan hari yang ingin dicari: ");
28        String hari = sc.next();
29        boolean found = false;
30        System.out.println("=====");
31        System.out.printf("%-25s %-15s %-15s %-15s\n", "Mata Kuliah", "Ruang", "Hari", "Jam");
32        System.out.println("=====");
33        for (int i = 0; i < jadwal.length; i++) {
34            if (jadwal[i][2].equalsIgnoreCase(hari)) {
35                found = true;
36                System.out.printf("%-25s %-15s %-15s %-15s\n",
37                    jadwal[i][0], jadwal[i][1], jadwal[i][2], jadwal[i][3]);
38            }
39        }
40        if (!found) {
41            System.out.println("Hari tidak ditemukan");
42        }
43    }
44
45    public static void outputTabel(String[][] jadwal) {
46        System.out.println("=====");
47        System.out.printf("%-25s %-15s %-15s %-15s\n", "Mata Kuliah", "Ruang", "Hari", "Jam");
48        System.out.println("=====");
49
50        for (int i = 0; i < jadwal.length; i++) {
51            System.out.printf("%-25s %-15s %-15s %-15s\n",
52                jadwal[i][0], jadwal[i][1], jadwal[i][2], jadwal[i][3]);
53        }
54    }
55
56    public static String[][] inputjadwal() {
57        System.out.print("Masukkan jumlah jadwal: ");
58        int n = sc.nextInt();
59        sc.nextLine();
60
61        String[][] jadwal = new String[n][4];
62        for (int i = 0; i < n; i++) {
63            System.out.println("\nMasukkan jadwal ke- " + (i + 1));
64            System.out.print("Mata Kuliah : ");
65            jadwal[i][0] = sc.nextLine();
66            System.out.print("Ruang : ");
67            jadwal[i][1] = sc.nextLine();
68            System.out.print("Hari : ");
69            jadwal[i][2] = sc.nextLine();
70            System.out.print("Jam : ");
71            jadwal[i][3] = sc.nextLine();
72        }
73        return jadwal;
74    }
75
76    public static void main(String[] args) {
77        String[][] jadwal = inputjadwal();
78        outputTabel(jadwal);
79        cariMatkul(jadwal);
80        cariHari(jadwal);
81    }
82 }
83
```

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>