Laporan Praktikum

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1. Praktikum Pemilihan

A. Membuat Class

Pemilihan11.java

B. Mendeklarasikan variabel

```
Scanner gs = new Scanner(System.in);
int tugas, kuis, uts, uas;
double nilaiAkhir;
String statusLulus, konversiNilai;
```

C. Memberikan input

```
System.out.println(x:"Program menghitung nilai akhir");
System.out.println(x:"============================");
System.out.print(s:"Masukkan nilai Tugas: ");
tugas = gs.nextInt();
System.out.print(s:"Masukkan nilai Kuis: ");
kuis = gs.nextInt();
System.out.print(s:"Masukkan nilai UTS: ");
uts = gs.nextInt();
System.out.print(s:"Masukkan nilai UAS: ");
uas = gs.nextInt();
```

d. Membuat kalkulasi nilai

```
21      if (tugas < 0 || tugas > 100 || kuis < 0 || kuis > 100 || uts < 0 || uts > 100 || uas < 0 || uas > 100) {
22          System.out.println(x:"nilai tidak valid!");
23      }
24
25      nilaiAkhir = (0.2 * tugas) + (0.2 * kuis) + (0.3 * uts) + (0.3 * uas);
26
27      if (nilaiAkhir > 80 && nilaiAkhir <= 100) {
28          konversiNilai = "A";
29      } else if (nilaiAkhir > 73 && nilaiAkhir <= 80) {
30          konversiNilai = "B+";
31      } else if (nilaiAkhir > 65 && nilaiAkhir <= 73) {
32          konversiNilai = "B";
33      } else if (nilaiAkhir > 60 && nilaiAkhir <= 65) {
34          konversiNilai = "C+";
35      } else if (nilaiAkhir > 50 && nilaiAkhir <= 60) {
36          konversiNilai = "C";
37      } else if (nilaiAkhir > 39 && nilaiAkhir <= 50) {
38          konversiNilai = "D";
39      } else {
40          konversiNilai = "E";
41      }
42
43      if (konversiNilai.equals(anObject:"A") || konversiNilai.equals(anObject:"B+") || konversiNilai.equals(anObject:"B")
44          || konversiNilai.equals(anObject:"C+") || konversiNilai.equals(anObject:"C")) {
45
46          statusLulus = "LULUS!";
47      } else {
48          statusLulus = "TIDAK LULUS!";
49      }
50
```

e. Hasil akhir

```
Program menghitung nilai akhir
==============================
Masukkan nilai Tugas: 90
Masukkan nilai Kuis: 90
Masukkan nilai UTS: 90
Masukkan nilai UAS: 90
Nilai akhir: 90.0
Nilai huruf: A
==============
LULUS!
```

2. Praktikum Perulangan

a. Membuat class

Perulangan11.java

b. Mendeklarasikan variabel

```
Scanner gs = new Scanner(System.in);
Long nim;
int n;
```

c. Memberikan input dan mencari 2 angka terakhir

```
System.out.print(s:"Masukkan NIM: ");
nim = gs.nextLong();
System.out.println(x:"==============");

n = (int) (nim % 100);
System.out.println("n: " +n);
if (n < 10) {
    n += 10;
}
```

d. Membuat perulangan dengan angka ganjil menjadi * dan angka 6 dan 10 dihilangkan

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

e. Hasil akhir

```
Masukkan NIM: 2341760140
==============
n: 40
* 2 * 4 * * 8 * * 12 * 14 * 16 * 18 * 20 * 22 * 24 * 26 * 28 * 30 * 32 * 34 * 36 * 38 * 40
```

3. Praktikum Array

a. Membuat class

Array11.java

b. Deklarasi variabel

```java
import java.util.Scanner;

public class Array11 {
    static Scanner gs = new Scanner(System.in);
    static String matkul[][] = new String[8][5];
    static double ips, hitNilai, sks;
```

c. Memberikan input

```java
public static void data() {
    System.out.println(x:"============================");
    System.out.println(x:"Program Hitung IP Semester");
    System.out.println(x:"============================");

    for (int i = 0; i < matkul.length; i++) {
        System.out.print("Masukkan nilai MK " + matkul[i][0] + ": ");
        matkul[i][1] = gs.next();
        System.out.print("Masukkan SKS MK " + matkul[i][0] + ": ");
        matkul[i][2] = gs.next();
        System.out.println();
    }
}
```

d. Memberi bobot nilai yang telah di input

```java
public static void tabelKonversi() {
    for (int i = 0; i < matkul.length; i++) {
        if (Double.valueOf(matkul[i][1]) > 80) {
            matkul[i][3] = "A";
            matkul[i][4] = "4.00";
        } else if (Double.valueOf(matkul[i][1]) > 73) {
            matkul[i][3] = "B+";
            matkul[i][4] = "3.50";
        } else if (Double.valueOf(matkul[i][1]) > 65) {
            matkul[i][3] = "B";
            matkul[i][4] = "3.00";
        } else if (Double.valueOf(matkul[i][1]) > 60) {
            matkul[i][3] = "C+";
            matkul[i][4] = "2.50";
        } else if (Double.valueOf(matkul[i][1]) > 50) {
            matkul[i][3] = "C";
            matkul[i][4] = "2.00";
        } else if (Double.valueOf(matkul[i][1]) > 39) {
            matkul[i][3] = "D";
            matkul[i][4] = "1.00";
        } else {
            matkul[i][3] = "E";
            matkul[i][4] = "1.00";
        }
    }

}
```

e. Membuat perhitungan IPS

```
public static void nilaiIp() {
    for (int i = 0; i < matkul.length; i++) {
        hitNilai += (Double.valueOf(matkul[i][4]) * Double.valueOf(matkul[i][2]));
        sks += Double.valueOf(matkul[i][2]);
    }
    ips = hitNilai / sks;
}
```

f. Membuat tampilan hasil

```
public static void hasilAkhir() {
    System.out.println("====================");
    System.out.println("Hasil Konversi Nilai");
    System.out.println("====================");

    System.out.println("MK \t\t\t\t\t Nilai Angka \t Nilai Huruf \t Bobot NIlai \t\t SKS");
    for (int i = 0; i < matkul.length; i++) {
        System.out.println(matkul[i][0] + "\t\t" + matkul[i][1] + "\t\t" + matkul[i][3] + "\t\t" + matkul[i][4]+ "\t\t" + matkul[i][2]);
    }
    System.out.println("==================");
    System.out.println("IPS: " + ips);
}
```

g. Hasil akhir

```
============================
Program Hitung IP Semester
============================
Masukkan nilai MK Pancasila                     : 88
Masukkan SKS MK Pancasila                       : 3

Masukkan nilai MK Critical Thinking and Problem Solving: 88
Masukkan SKS MK Critical Thinking and Problem Solving: 3

Masukkan nilai MK Konsep teknologi Informasi    : 33
Masukkan SKS MK Konsep teknologi Informasi      : 2

Masukkan nilai MK Bahasa Inggris                        : 33
Masukkan SKS MK Bahasa Inggris                  : 2

Masukkan nilai MK Matematika Dasar              : 33
Masukkan SKS MK Matematika Dasar                : 2

Masukkan nilai MK Dasar pemrograman             : 33
Masukkan SKS MK Dasar pemrograman               : 2

Masukkan nilai MK Praktikum Dasar Pemrograman   : 33
Masukkan SKS MK Praktikum Dasar Pemrograman     : 2

Masukkan nilai MK Keselamatan dan Kesehatan Kerja       : 33
Masukkan SKS MK Keselamatan dan Kesehatan Kerja : 2

====================
Hasil Konversi Nilai
====================
MK                                      Nilai Angka     Nilai Huruf     Bobot NIlai     SKS
Pancasila                                       88              A               4.00            3
Critical Thinking and Problem Solving           88              A               4.00            3
Konsep teknologi Informasi                      33              E               1.00            2
Bahasa Inggris                                  33              E               1.00            2
Matematika Dasar                                33              E               1.00            2
Dasar pemrograman                               33              E               1.00            2
Praktikum Dasar Pemrograman                     33              E               1.00            2
Keselamatan dan Kesehatan Kerja                 33              E               1.00            2
==================
IPS: 2.0
```

4. Praktikum fungsi

A. Membuat class

Fungsi11.java

b. Deklarasi variabel

```
public class Fungsi11 {
    static Scanner gs = new Scanner(System.in);
    static String tokoBunga[][] = new String[4][5];
    static String bungaRusak[][] = new String[4][5];
    static int aglomena=75000, keladi=50000, alocasia=60000, mawar=10000;
    static String namaBunga[]  = {"Aglonema", "Keladi \t", "Alocasia", "Mawar \t"};

    Run | Debug
    public static void main(String[] args) {
        int pilihan = 0;
        tokoBunga[0][0] = "RoyalGarden 1";
        tokoBunga[0][1] = "10";
        tokoBunga[0][2] = "5";
        tokoBunga[0][3] = "15";
        tokoBunga[0][4] = "7";

        tokoBunga[1][0] = "RoyalGarden 2";
        tokoBunga[1][1] = "6";
        tokoBunga[1][2] = "11";
        tokoBunga[1][3] = "9";
        tokoBunga[1][4] = "12";

        tokoBunga[2][0] = "RoyalGarden 3";
        tokoBunga[2][1] = "2";
        tokoBunga[2][2] = "10";
        tokoBunga[2][3] = "10";
        tokoBunga[2][4] = "5";

        tokoBunga[3][0] = "RoyalGarden 4";
        tokoBunga[3][1] = "5";
        tokoBunga[3][2] = "7";
        tokoBunga[3][3] = "12";
        tokoBunga[3][4] = "9";
```

c. Membuat menu

```
while (true) {
    System.out.println();
    System.out.println(x:"1. Cek Pendapatan Sold Out Semua Cabang");
    System.out.println(x:"2. Cek Stok Cabang RoyalGarden 4");
    System.out.println(x:"3. Exit");

    System.out.print(s:"Pilih (1/2/3) :");
    pilihan = 0;
    pilihan = gs.nextInt();
```

d. Fungsi hslPendapatan untuk melihat pendapatan setiap cabang

```
public static int[][] hslPendapatan(){
    int[][] income = new int[4][5];

    for (int i=0; i<income.length; i++){
        income[i][0] = Integer.valueOf(tokoBunga[i][1]) * aglomena;
        income[i][1] = Integer.valueOf(tokoBunga[i][2]) * keladi;
        income[i][2] = Integer.valueOf(tokoBunga[i][3]) * alocasia;
        income[i][3] = Integer.valueOf(tokoBunga[i][4]) * mawar;
        income[i][3] = 0;
    }
```

e.Fungsi tmbhStok untuk update stok bunga

```
public static int[][] hslPendapatan(){
    int[][] income = new int[4][5];

    for (int i=0; i<income.length; i++){
        income[i][0] = Integer.valueOf(tokoBunga[i][1]) * aglomena;
        income[i][1] = Integer.valueOf(tokoBunga[i][2]) * keladi;
        income[i][2] = Integer.valueOf(tokoBunga[i][3]) * alocasia;
        income[i][3] = Integer.valueOf(tokoBunga[i][4]) * mawar;
        income[i][3] = 0;
    }
```

f. Fungsi data untuk menampilkan pendapatan setiap cabang dan stok untuk melihat stok setiap cabang

```
public static void data(int[][] income){
    System.out.println(x:"\t\t\t Aglonema \t Keladi \t Alocasia \t Mawar \t Total");
    for (int i=0; i<tokoBunga.length; i++){
        System.out.println(tokoBunga[i][0] +"\t\t "+income[i][0]+" \t "+income[i][1]+" \t "+income[i][2]+" \t "+income[i][3]+"\t" + (income[i][0]+income[i][1
    }


}
public static void stok(){
    System.out.println();
    System.out.println(x:"Toko Bunga RoyalGarden 4");
    System.out.println(x:"Jenis \t\t Stok Awal \tRusak/Mati \t Stok Akhir");
    for(int i=0; i<namaBunga.length; i++){
        System.out.println(namaBunga[i] +"\t\t"+tokoBunga[3][i+1] +"\t\t"+bungaRusak[3][i+1] +"\t\t"+ (Integer.valueOf(tokoBunga[3][i+1])-Integer.valueOf(bur
    }
}
```

g. Hasil akhir

```
1. Cek Pendapatan Sold Out Semua Cabang
2. Cek Stok Cabang RoyalGarden 4
3. Exit
Pilih (1/2/3) :1
                    Aglonema        Keladi          Alocasia        Mawar   Total
RoyalGarden 1       750000          250000          900000          0       1900000
RoyalGarden 2       450000          550000          540000          0       1540000
RoyalGarden 3       150000          500000          600000          0       1250000
RoyalGarden 4       375000          350000          720000          0       1445000

1. Cek Pendapatan Sold Out Semua Cabang
2. Cek Stok Cabang RoyalGarden 4
3. Exit
Pilih (1/2/3) :2

Toko Bunga RoyalGarden 4
Jenis           Stok Awal      Rusak/Mati       Stok Akhir
Aglonema                5               1               4
Keladi                  7               2               5
Alocasia                12              0               12
Mawar                   9               5               4

1. Cek Pendapatan Sold Out Semua Cabang
2. Cek Stok Cabang RoyalGarden 4
3. Exit
Pilih (1/2/3) :3
PS C:\Users\Pongo\Documents\Kuliah\smstr2\alg&stkdat\jobsheet\jobsheet1>
```