Nama : Restu Lestari Mulianingrum

NIM : A11.2022.14668

Kelompok : A11.4415

**PRAKTIKUM 4**

**Program mencetak nilai**

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| **Code Nilai.java** |
| import java.util.Scanner;  public class Nilai {      String nim;      String nama;      float nilaiUts, nilaiTugas, nilaiUas, pNilaiTugas, pNilaiUts, pNilaiUas, nilaiAkhir;      String predikat;      String nHuruf;      Scanner key = new Scanner(System.in);      public Nilai(){}; //konstruktor      public Nilai(String nim, String nama, float nilaiUts, float nilaiTugas, float nilaiUas) {          this.nim = nim;          this.nama = nama;          this.nilaiUts = nilaiUts;          this.nilaiTugas = nilaiTugas;          this.nilaiUas = nilaiUas;      }      void inputNilai() {          System.out.println("========== Input Nilai ==========");          System.out.print("Nim       : ");          nim = key.nextLine();          System.out.print("Nama      : ");          nama = key.nextLine();          System.out.print("Nilai Tugas   : ");          nilaiTugas = key.nextFloat();          System.out.print("Nilai UTS : ");          nilaiUts = key.nextFloat();          System.out.print("Nilai UAS : ");          nilaiUas = key.nextFloat();      }      void hitungNilai() {          pNilaiTugas = nilaiTugas \* 0.20f;          pNilaiUts = nilaiUts \* 0.35f;          pNilaiUas = nilaiUas \* 0.45f;          nilaiAkhir = pNilaiUts + pNilaiTugas + pNilaiUas;      }      String getNilHuruf(float nilai) {          if (nilai >= 85)              nHuruf = "A";          else if (nilai >= 70 && nilai < 85)              nHuruf = "B";          else if (nilai >= 60 && nilai < 70)              nHuruf = "C";          else if (nilai >= 40 && nilai < 60)              nHuruf = "D";          else              nHuruf = "E";          return nHuruf;      }      String getPredikat(String huruf) {          switch (huruf) {              case "A":                  predikat = "Apik";                  break;              case "B":                  predikat = "Baik";                  break;              case "C":                  predikat = "Cukup";                  break;              case "D":                  predikat = "Dablek";                  break;              default:                  predikat = "Elek";          }          return predikat;      }      void cetakNilai() {          hitungNilai();          System.out.println("========== Cetak Nilai ==========");          System.out.println("NIM         : " + nim);          System.out.println("Nama        : " + nama);          System.out.println("Nilai UTS   : " + nilaiUts +" 20%   : " +pNilaiUts);          System.out.println("Nilai Tugas : " + nilaiTugas +" 35%   : " +pNilaiTugas);          System.out.println("Nilai UAS   : " + nilaiUas +" 45%   : " +pNilaiUas);          System.out.println("Nilai Akhir : " + nilaiAkhir);          System.out.println("Nilai Huruf : " + getNilHuruf(nilaiAkhir));          System.out.println("Predikat    : " + getPredikat(nHuruf));      }  } |
| **Code TestNilai.java** |
| import java.util.Scanner;  import java.io.\*;  public class TestNilai {      public static void main(String[] args) throws IOException{          Scanner input = new Scanner(System.in);          BufferedReader br = new BufferedReader(              new InputStreamReader(System.in));          String inputLagi = "";            Nilai nilaiku = new Nilai();          nilaiku.nim = "A11.2022.14668";          nilaiku.nama = "Restu Lestari";          nilaiku.nilaiTugas = 97;          nilaiku.nilaiUts = 95;          nilaiku.nilaiUas = 95;          nilaiku.hitungNilai();          nilaiku.cetakNilai();          do{          Nilai mahasiswa1 = new Nilai();          mahasiswa1.inputNilai();          mahasiswa1.hitungNilai();          mahasiswa1.cetakNilai();          System.out.println("Input data lagi [Y/T]? ");          inputLagi = input.nextLine();          } while (inputLagi.equalsIgnoreCase("Y"));      }  } |
| **Output** |
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**Latihan 1**

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| **Code Penjualan.java** |
| import java.util.Scanner;  public class Penjualan {      String kode, nama;      float harga;      double total;      int jumlah;      Scanner key = new Scanner(System.in);      public Penjualan() {      };      public void setData(String kode, String nama, float harga, int jumlah) {          this.kode = kode;          this.nama = nama;          this.harga = harga;          this.jumlah = jumlah;      }      void inputData(){          System.out.println("Masukkan data penjualan");          System.out.print("Kode Barang   : ");          kode = key.nextLine();          System.out.print("Nama Barang   : ");          nama = key.nextLine();          System.out.print("Harga Satuan Barang   : ");          harga = key.nextFloat();          System.out.print("Jumlah Barang : ");          jumlah = key.nextInt();      }      void hitungTotal() {          total = harga \* jumlah;          System.out.println("Total Harga : " + total);      }      String getBonus() {          String bonus = "";          if (total >= 500000 && jumlah > 5) {              bonus = "Setrika";          } else if (total >= 100000 && jumlah > 3) {              bonus = "Payung";          } else if (total >= 50000 && jumlah > 2) {              bonus = "Ballpoint";          } else              bonus = "tidak mendapatkan bonus";          return bonus;      }      void cetakNota() {          System.out.println("========== Data Penjualan ==========");          System.out.println("Kode Barang : " + kode);          System.out.println("Nama Barang : " + nama);          System.out.println("Harga Satuan Barang : " + harga);          System.out.println("Jumlah Barang : " + jumlah);          hitungTotal();          System.out.println("Bonus : " + getBonus());      }  } |
| **Code TestPenjualan.java** |
| import java.util.Scanner;  public class TestPenjualan {      public static void main(String[] args) {          Scanner input = new Scanner(System.in);          String inputLagi;          do {              Penjualan penjualan = new Penjualan();              penjualan.inputData();              penjualan.cetakNota();              System.out.println("Input data lagi [Y/T]? ");              inputLagi = input.nextLine();          } while (inputLagi.equalsIgnoreCase("Y"));          input.close();      }  } |
| **Output** |
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**Latihan 2**

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| **Code Determinan.java** |
| import static java.lang.Math.sqrt;  import java.util.Scanner;  public class Determinan {      int a, b, c;      long D;      double x1, x2;      Scanner key = new Scanner(System.in);      void inputABC() {          System.out.println("======= Masukkan Nilai =======");          System.out.print("Masukkan nilai a : "); a = key.nextInt();          System.out.print("Masukkan nilai b : "); b = key.nextInt();          System.out.print("Masukkan nilai c : "); c = key.nextInt();      }      void hitungD() {          D = (b \* b)-(4 \* a \* c);      }      void hitungX1X2() {          if (D > 0) {              x1 = (-b + Math.sqrt(D) / (2 \* a));              x2 = (-b - Math.sqrt(D) / (2 \* a));              System.out.println("Akar-akar persamaan kuadrat adalah: \n x1 = " + x1 + "\n x2 = " + x2);          } else if (D == 0) {              x1 = x2 = -b / (2 \* a);              System.out.println("Akar-akar persamaan kuadrat adalah: x1 = x2" + x1);          } else {              x1 = -b / (2 \* a) + Math.sqrt(-D) / (2 \* a);              x2 = -b / (2 \* a) - Math.sqrt(-D) / (2 \* a);              System.out.println("Akar-akar imajiner persamaan kuadrat adalah:\nx1 = " + x1 + "i\nx2 = " + x2 + "i");          }      }      void cetakdeterminan() {          hitungD();          System.out.println("======= Cetak Nilai =======");          System.out.println("Nilai a : " + a);          System.out.println("Nilai b : " + b);          System.out.println("Nilai c : " + c);          System.out.println("Determinan (D) : " + D);          hitungX1X2();      }  } |
| **Code TestDeterminan.java** |
| import java.util.Scanner;  public class TestDeterminan {      public static void main(String[] args) {          Scanner input = new Scanner(System.in);          String inputLagi;          do {              Determinan abc = new Determinan();              abc.inputABC();              abc.hitungD();              //abc.hitungX1X2();              abc.cetakdeterminan();              System.out.println("Input data lagi [Y/T]?");              inputLagi = input.next();          } while (inputLagi.equalsIgnoreCase("Y"));          input.close();      }  } |

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| **Output** |
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**Latihan 3**

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| --- |
| **Code KonversiDetik.java** |
| import java.util.Scanner;  public class KonversiDetik {      int detik;      int hasil;      Scanner key = new Scanner(System.in);      public KonversiDetik(int detik){          this.detik = detik;      }      public KonversiDetik(){}      void inputDetik(){          System.out.print("Masukkan detik    : "); detik = key.nextInt();      }      void hari(){          hasil = detik/86400;          System.out.println("Hari    : " + hasil);      }      void jam(){          hasil = (detik%86400)/3600;          System.out.println("Jam : " + hasil);      }      void menit(){          hasil = ((detik%86400)%3600)/60;          System.out.println("Menit   : " + hasil);      }      void detik(){          hasil = ((detik%86400)%3600)%60;          System.out.println("Detik   : " + hasil);      }  } |
| **Code TestKonversiDetik.java** |
| import java.util.Scanner;  public class TestKonversiDetik {      public static void main(String[] args) {          Scanner input = new Scanner(System.in);          String inputLagi;          do {              KonversiDetik konversi = new KonversiDetik();              konversi.inputDetik();              konversi.hari();              konversi.jam();              konversi.menit();              konversi.detik();              System.out.println("Input data lagi [Y/T]? ");              inputLagi = input.nextLine();          } while (inputLagi.equalsIgnoreCase("Y"));          input.close();      }  } |
| **Output** |
|  |