RESPONSI PRAKTIKUM
ALGORITMA DAN PEMROGRAMAN LANJUT

Disusun Oleh :

NAMA : Raden Isnawan Argi Aryasatya

NIM : 195410257

JURUSAN : Informatika

JENJANG : S1

SEMESTER ANTARA

Sekolah Tinggi Manajemen Informatika Komputer

AKAKOM

YOGYAKARTA

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NOMOR 1

```
import java.util.Scanner;
Public class Penghargaan{
    public static void main(String args[]){
    Scanner scan = new Scanner(System.in);
    int nim;
    int sem;
    String nama;
    System.out.print("NIM: ");
    nim = scan.nextInt();
    System.out.print("Nama: ");
    nama = scan.next();
    System.out.print("Jumlah Semester: ");
    sem = scan.nextInt();
    double[] data = new double[8];
     int[] keluar = new int[8];
    For(int i=0; i<8; i++){
        System.out.print("IPS "+(i+1)+":");
        data[i] = scan.nextDouble();
    }
    System.out.println("Penghargaan setiap semester:");
    keluar = penghargaan(data);
    For(int i=0; i<8; i++){
        System.out.println(data[i]+" "+keluar[i]);
    }
}
public static int[] penghargaan(double[] x){
    int n = x.length;
    int hasil[] = new int[n];
    For(int i=0; i<n; i++){
        if((x[i]>3.0)&&(x[i]<3.5){
            hasil[i] = 100000;
        }else if(x[i]>=3.5){
            hasil[i] = 200000;
        }
    }
    return hasil
    }
}
```

OUTPUT

```
NIM:195410257
Nama:Raden
Jumlah semester:8
IPS 1 : 3.2
IPS 2 : 3.1
IPS 3 : 3.5
IPS 4 : 3.9
IPS 5 : 4.0
IPS 6 : 3.4
IPS 7 : 3.8
IPS 8 : 3.3
Penghargaan setiap semester:
3.2  100000
3.1  100000
3.5  200000
3.9  200000
4.0  200000
3.4  100000
3.8  200000
3.3  100000
```

NOMOR 2 DI HALAMAN SELANJUTNYA

Nomor 2

```
import java.util.Scanner;
Public class Usia{
   Public static void main(String args[]){
   Scanner scan =new Scanner (system.in);
   int[]data = new int [7];
   String[] keluar = new String[7];
   For (int i=0; i<7; itt){
      System.out.print("Usia -"+(i+1)+":");
      data[i] = scan.nextInt();
   }
   System.out.println("=====================")
   System.out.println(" Hasil konversi")
   System.out.println("=====================")
   keluar = konversiUsia(data);
   For(int i=0; i<7; itt){
      System.out.println(data[i]+" "+keluar[i]);
   }
}
Public static String[] konversiUsia (int[]x){
   int n = X.length;
   String hasil[] =new String [n];
   For (int i=0; i<n; itt){
      if ((x[i]>0)&&(x[i]<=5)){
         hasil[i]="balita";
      }else if ((x[i]>=6)&&(x[i]<=10)){
         hasil[i]="anak";
      } else if ((x[i]>=11)&&(x[i]<=20)){
         hasil[i]="remaja";
      }else if ((x[i]>=21)&&(x[i]<=35)){
         hasil[i]="dewasa";
      }else if ((x[i]>=36)&&(x[i]<=50)){
         hasil[i]="paruh baya";
      }else if (x[i]>50){
         hasil[i]="tua";
      }else{
         hasil[i]="Usia salah"
      }
   }
   return hasil;
}}
```

OUTPUT

```
Usia-1 : 3
Usia-2 : 8
Usia-3 :16
Usia-4 :25
Usia-5 :43
Usia-6 :55
Usia-7 : 0
= = = = = = = = = = = = = = =
Hasil konversi
= = = = = = = = = = = = = = =
3 balita
8 anak
16 remaja
25 dewasa
43 paruh baya
55 tua
 0 Usia salah
```

NOMOR 3 DI HALAMAN SELANJUTNYA

NOMOR 3

```
import java.util.Scanner;
public class Rekursif {
    public static long Tes(int n){
      if (n==0)
         return 0;
      else if (n==1)
         return 1;
      else
         return ((n-2)+(n*4));
    }
    public static void main(String args[]){
        Scanner input = new Scanner(System.in);
        System.out.print("masukkan angka: ");
        int n=input.nextInt();
        System.out.println("Hasil rekursif =" +Tes(n));
    }
}
```

Output
masukkan angka: 0
Hasil rekursif = 0

Output
masukkan angka: 1
Hasil rekursif = 1

Output
masukkan angka: 5
Hasil rekursif = 23

Terima Kasih.