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PEMROGRAMAN BERORIENTASI OBYEK

PRAKTIKUM 3

1. Buat Class bernama matematika, yang berisi method:

- penambahan
- pengurangan
- perkalian
- pembagian

Buat Class bernama matematikaDemo, yang mengeksekusi method dan menampilkan:

- Pertambahan: $20 + 20 = 40$
- Pengurangan: $10 - 5 = 5$
- Perkalian: $10 \times 20 = 200$
- Pembagian: $20 / 2 = 10$

PENYELESAIAN

Matematika Java Class

```
public class Matematika {  
    // variable dan tipe data  
    int x = 0;  
    int y = 0;  
    int Pertambahan, Pengurangan, Perkalian, Pembagian;  
  
    // buat method Pertambahan  
    public int Pertambahan(int x, int y){  
        return (x+y);  
    }  
  
    // buat method Pengurangan  
    public int Pengurangan(int x, int y){  
        return (x-y);  
    }  
  
    // buat method Perkalian  
    public int Perkalian(int x, int y){
```

```

        return (x*y);
    }

    // buat method Pembagian
    public int Pembagian(int x, int y){
        return (x/y);
    }
}

```

MatematikaDemo Java Main Class

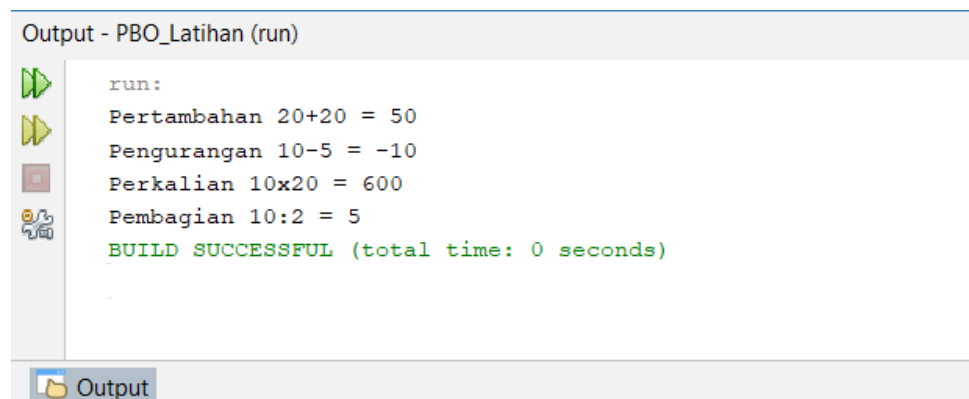
```

public class MatematikaDemo {
    public static void main(String[] args) {
        // membuat object
        Matematika operasi1 = new Matematika();

        // cetak hasil
        System.out.println("Pertambahan      20+20      \t=      "
+operasi1.Pertambahan(20,30));
        System.out.println("Pengurangan      10-5      \t=      "
+operasi1.Pengurangan(20,30));
        System.out.println("Perkalian      10x20      \t=      "
+operasi1.Perkalian(20,30));
        System.out.println("Pembagian      10:2      \t\t=      "
+operasi1.Pembagian(30,6));
    }
}

```

Output



```

Output - PBO_Latihan (run)

run:
Pertambahan 20+20 = 50
Pengurangan 10-5 = -10
Perkalian 10x20 = 600
Pembagian 10:2 = 5
BUILD SUCCESSFUL (total time: 0 seconds)

```

2. Buatlah program konversi suhu, dari Celcius dengan ketentuan seperti table berikut :

Skala yang diinginkan	Formula
Kelvin	$K = ^\circ\text{C} + 273,15$
Fahrenheit	$^\circ\text{F} = ^\circ\text{C} \times 1,8 + 32$
Rankine	$^\circ\text{Ra} = ^\circ\text{C} \times 1,8 + 491,67$
Delisle	$^\circ\text{De} = (100 - ^\circ\text{C}) \times 1,5$
Newton	$^\circ\text{N} = ^\circ\text{C} \times 33/100$
Réaumur	$^\circ\text{Ré} = ^\circ\text{C} \times 0,8$
Rømer	$^\circ\text{Rø} = ^\circ\text{C} \times 21/40 + 7,5$

PENYELESAIAN

KonversiSuhu Java Class

```
public class KonversiSuhu {  
    // buat method Kelvin  
    public double Kelvin(double celcius){  
        return (celcius + 273.15);  
    }  
    // buat method Fahrenheit  
    public double Fahrenheit(double celcius){  
        return (celcius * 1.8 + 32);  
    }  
    // buat method Rankine  
    public double Rankine(double celcius){  
        return (celcius * 1.8 + 491.67);  
    }  
    // buat method Delisle  
    public double Delisle(double celcius){  
        return (100 - celcius) * 1.5;  
    }  
    // buat method Newton  
    public double Newton(double celcius){  
        return (celcius * 33/100);  
    }  
    // buat method Reaumur  
    public double Reaumur(double celcius){  
        return (celcius * 0.8);  
    }  
}
```

```

        // buat method Romer
        public double Romer(double celcius){
            return (celcius * 21 / 40 + 7.5);
        }
    }
}

```

KonversiSuhuDemo Java Main Class

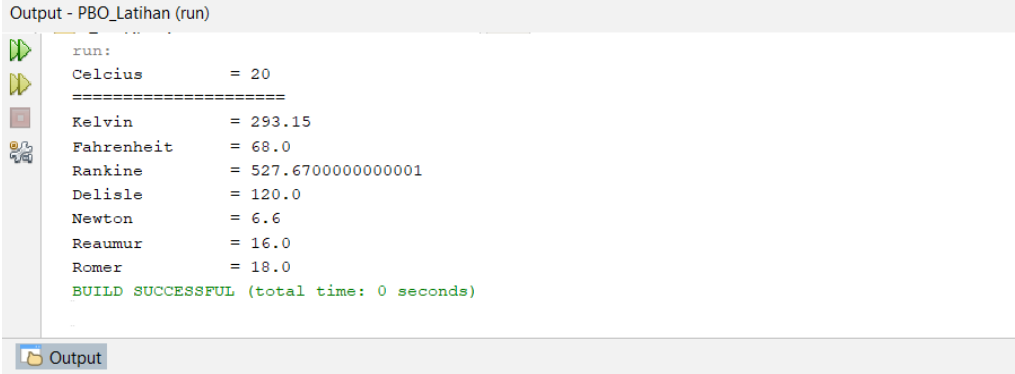
```

public class KonversiSuhuDemo {
    public static void main(String[] args) {
        // buat object value
        KonversiSuhu value = new KonversiSuhu();

        // cetak hasil konversi suhu dari object value
        System.out.println("Celcius \t= 20 ");
        System.out.println("=====");
        System.out.println("Kelvin \t\t= " +value.Kelvin(20));
        System.out.println("Fahrenheit \t= " +value.Fahrenheit(20));
        System.out.println("Rankine \t= " +value.Rankine(20));
        System.out.println("Delisle \t= " +value.Delisle(20));
        System.out.println("Newton \t\t= " +value.Newton(20));
        System.out.println("Reaumur \t= " +value.Reaumur(20));
        System.out.println("Romer \t\t= " +value.Romer(20));
    }
}

```

Output



```

Output - PBO_Latihan (run)

run:
Celcius      = 20
=====
Kelvin       = 293.15
Fahrenheit   = 68.0
Rankine      = 527.67000000000001
Delisle      = 120.0
Newton       = 6.6
Reaumur      = 16.0
Romer        = 18.0
BUILD SUCCESSFUL (total time: 0 seconds)

```