

# LAPORAN PRAKTIKUM

PEMROGRAMAN BERORIENTASI OBJEK LANJUT

2023



Prepared By:

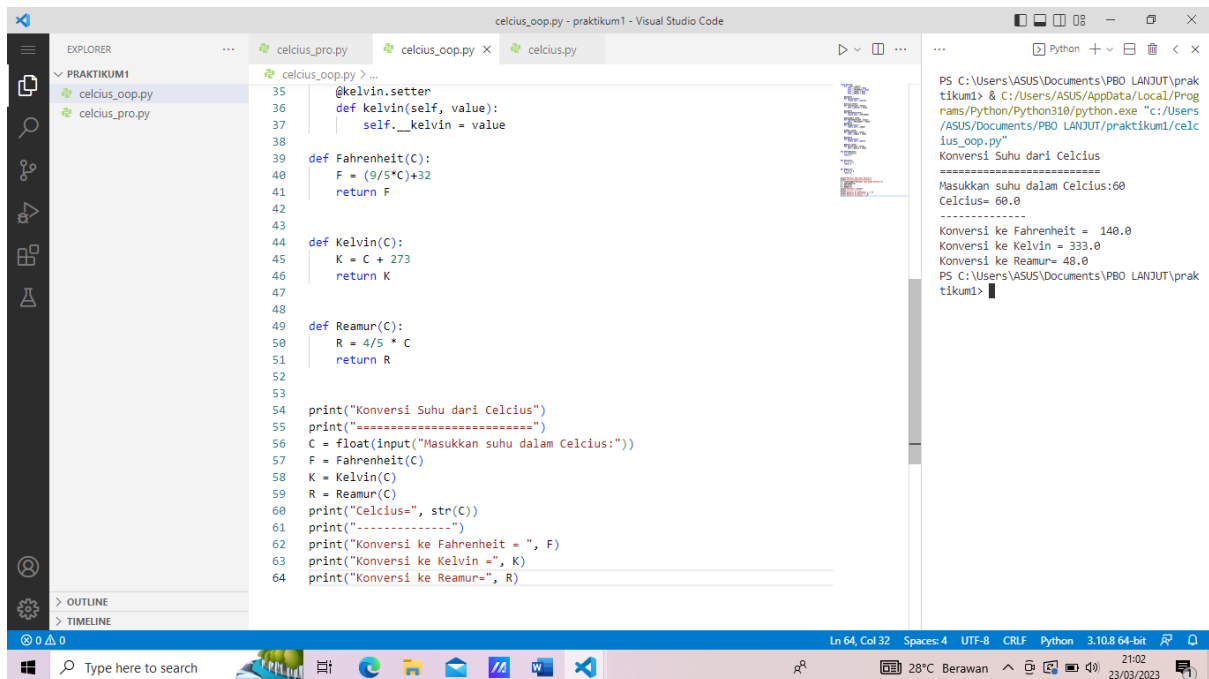
## PRAKTIKUM 1

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## Celcius\_oop



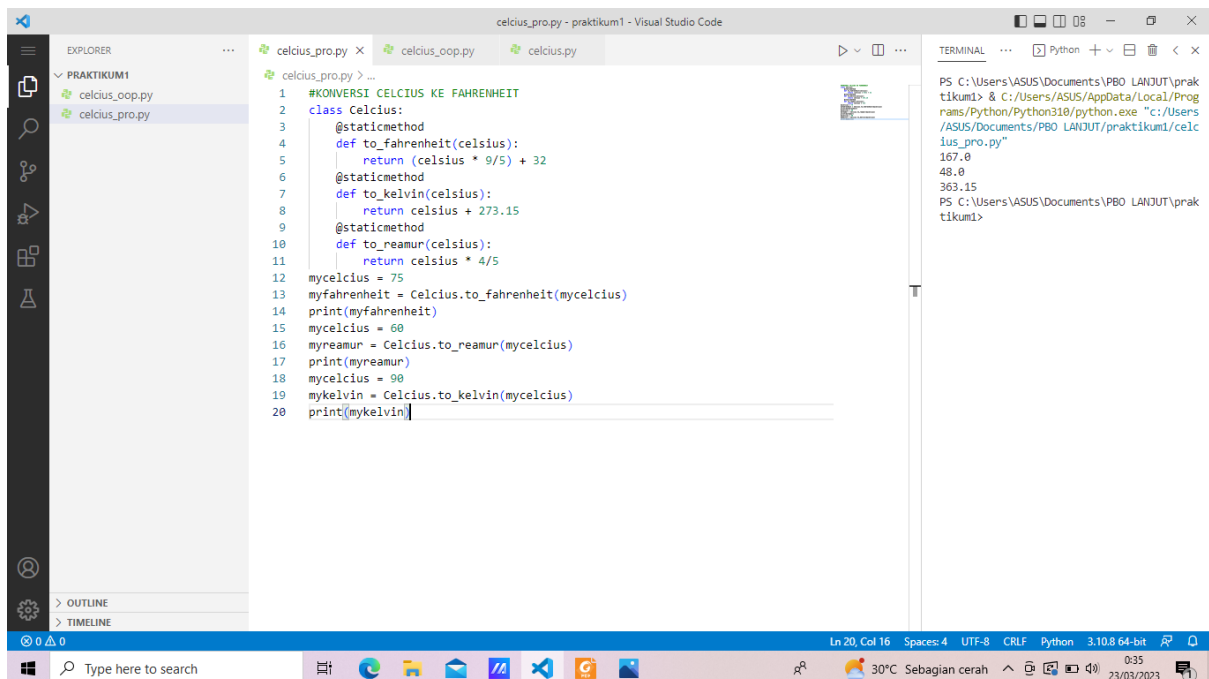
The screenshot shows a Visual Studio Code editor with a file named `celcius_oop.py` open. The code defines a `Celcius` class with a `__kelvin.setter` property, and methods `Fahrenheit(C)`, `Kelvin(C)`, and `Reamur(C)`. It also includes a main block that prompts the user for a temperature in Celsius and prints the conversions to Fahrenheit, Kelvin, and Reamur.

```
35 @kelvin.setter
36 def kelvin(self, value):
37     self.__kelvin = value
38
39 def Fahrenheit(C):
40     F = (9/5*C)+32
41     return F
42
43
44 def Kelvin(C):
45     K = C + 273
46     return K
47
48
49 def Reamur(C):
50     R = 4/5 * C
51     return R
52
53
54 print("Konversi Suhu dari Celcius")
55 print("-----")
56 C = float(input("Masukkan suhu dalam Celcius:"))
57 F = Fahrenheit(C)
58 K = Kelvin(C)
59 R = Reamur(C)
60 print("Celcius=", str(C))
61 print("-----")
62 print("Konversi ke Fahrenheit = ", F)
63 print("Konversi ke Kelvin = ", K)
64 print("Konversi ke Reamur=", R)
```

The terminal output shows the execution of the script:

```
PS C:\Users\ASUS\Documents\PBO LANDUT\praktikum1> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe "c:/Users/ASUS/Documents/PBO LANDUT/praktikum1/celcius_oop.py"
Konversi Suhu dari Celcius
-----
Masukkan suhu dalam Celcius:60
Celcius= 60.0
-----
Konversi ke Fahrenheit = 140.0
Konversi ke Kelvin = 333.0
Konversi ke Reamur= 48.0
PS C:\Users\ASUS\Documents\PBO LANDUT\praktikum1>
```

## Celcius\_pro



The screenshot shows a Visual Studio Code editor with a file named `celcius_pro.py` open. The code defines a `Celcius` class with static methods `to_fahrenheit(celsius)`, `to_kelvin(celsius)`, and `to_reamur(celsius)`. It also includes a main block that uses these methods to convert a temperature from Celsius to Fahrenheit, Reamur, and Kelvin.

```
1 #KONVERSI CELCIUS KE FAHRENHEIT
2 class Celcius:
3     @staticmethod
4     def to_fahrenheit(celsius):
5         return (celsius * 9/5) + 32
6     @staticmethod
7     def to_kelvin(celsius):
8         return celsius + 273.15
9     @staticmethod
10    def to_reamur(celsius):
11        return celsius * 4/5
12
13 mycelcius = 75
14 myfahrenheit = Celcius.to_fahrenheit(myclcius)
15 print(myfahrenheit)
16 mycelcius = 60
17 myreamur = Celcius.to_reamur(myclcius)
18 print(myreamur)
19 mycelcius = 90
20 mykelvin = Celcius.to_kelvin(myclcius)
21 print(mykelvin)
```

The terminal output shows the execution of the script:

```
PS C:\Users\ASUS\Documents\PBO LANDUT\praktikum1> & C:/Users/ASUS/AppData/Local/Programs/Python/Python310/python.exe "c:/Users/ASUS/Documents/PBO LANDUT/praktikum1/celcius_pro.py"
167.0
48.0
363.15
PS C:\Users\ASUS\Documents\PBO LANDUT\praktikum1>
```

## Script celcius\_oop

```
class Celcius:
    def __init__(self):
        self.__celcius = None
        self.__fahrenheit = None
```

```

        self.__reamur = None
        self.__kelvin = None

    @property
    def celcius(self):
        return self.__celcius

    @celcius.setter
    def celcius(self, value):
        self.__celcius = value

    @property
    def fahrenheit(self):
        return self.__fahrenheit

    @fahrenheit.setter
    def fahrenheit(self, value):
        self.__fahrenheit = value

    @property
    def reamur(self):
        return self.__reamur

    @reamur.setter
    def reamur(self, value):
        self.__reamur = value

    @property
    def kelvin(self):
        return self.__kelvin

    @kelvin.setter
    def kelvin(self, value):
        self.__kelvin = value

def Fahrenheit(C):
    F = (9/5*C)+32
    return F

def Kelvin(C):
    K = C + 273
    return K

def Reamur(C):
    R = 4/5 * C
    return R

```

```

print("Konversi Suhu dari Celcius")
print("=====")
C = float(input("Masukkan suhu dalam Celcius:"))
F = Fahrenheit(C)
K = Kelvin(C)
R = Reamur(C)
print("Celcius=", str(C))
print("-----")
print("Konversi ke Fahrenheit = ", F)
print("Konversi ke Kelvin =", K)
print("Konversi ke Reamur=", R)

```

### script celcius\_pro

```

#KONVERSI CELCIUS KE FAHRENHEIT
class Celcius:
    @staticmethod
    def to_fahrenheit(celsius):
        return (celsius * 9/5) + 32
    @staticmethod
    def to_kelvin(celsius):
        return celsius + 273.15
    @staticmethod
    def to_reamur(celsius):
        return celsius * 4/5
mycelcius = 75
myfahrenheit = Celcius.to_fahrenheit(mycelcius)
print(myfahrenheit)
mycelcius = 60
myreamur = Celcius.to_reamur(mycelcius)
print(myreamur)
mycelcius = 90
mykelvin = Celcius.to_kelvin(mycelcius)
print(mykelvin)

```