

PROGRAM BERORIENTASI OBYEK LANJUT (POB/OOP)
PRAKTIKUM 1

*Diajukan untuk memenuhi salah satu tugas mata kuliah Program Berorientasi Obyek
Lanjutan yang diampu oleh Freddy Wicaksono,M.Kom*

Disusun Oleh :
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Kelas D



PROGRAM STUDI TEKNIK INFORMATIKA
FAKULTAS TEKNIK
UNIVERSITAS MUHAMMADIYAH CIREBON

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Soal Praktikum:

1. Buatlah Class yang mengimplementasikan Prosedural, beri nama: celcius_pro.py
a. Sintaks :

```
class Celsius :
    def to_fahrenheit(celsius):
        return (celsius * 9/5) + 32

    def to_reamur(celsius):
        return celsius * 4/5

    def to_kelvin(celsius):
        return celsius + 273.15

print("|  CONVERTER  CELSIUS_PRO  |\n")

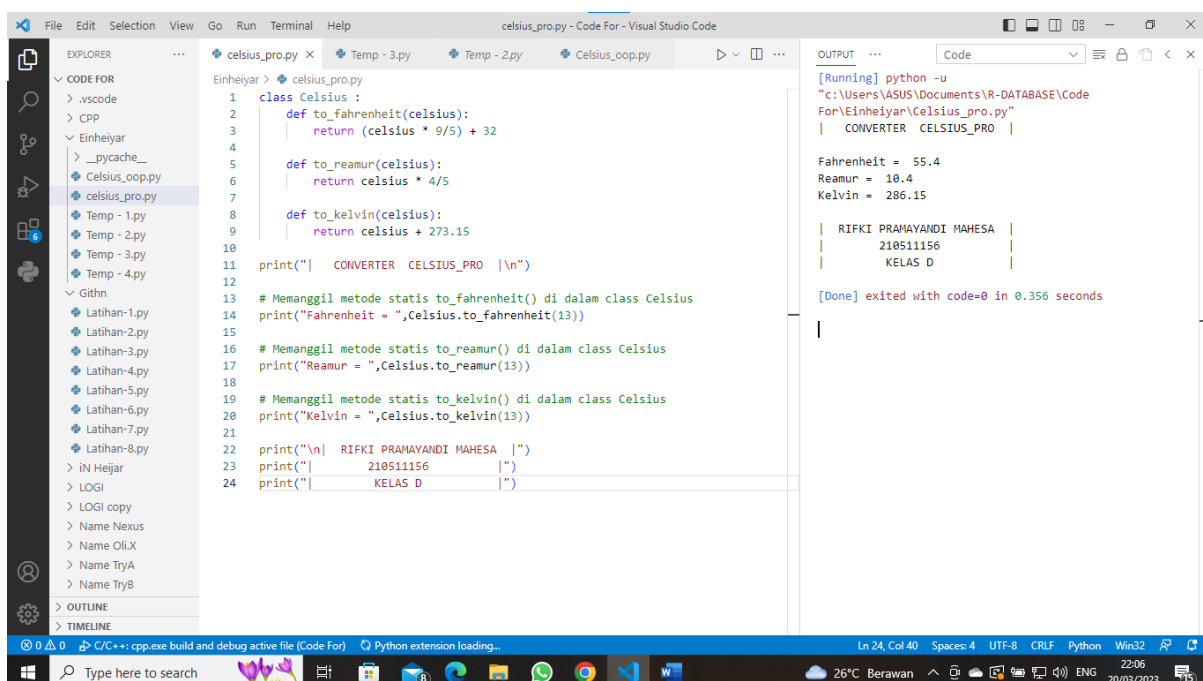
# Memanggil metode statis to_fahrenheit() di dalam class Celsius
print("Fahrenheit = ",Celsius.to_fahrenheit(13))

# Memanggil metode statis to_reamur() di dalam class Celsius
print("Reamur = ",Celsius.to_reamur(13))

# Memanggil metode statis to_kelvin() di dalam class Celsius
print("Kelvin = ",Celsius.to_kelvin(13))

print("\n|  RIFKI PRAMAYANDI MAHESA  |")
print("|          210511156          |")
print("|          KELAS D              |")
```

b. Hasil Program :



```
File Edit Selection View Go Run Terminal Help
celcius_pro.py - Code For - Visual Studio Code

EXPLORER
CODE FOR
  .vscode
  CPP
  Einheiyar
    _pycache_
    Celsius_oop.py
    celcius_pro.py
    Temp - 1.py
    Temp - 2.py
    Temp - 3.py
    Temp - 4.py
  Githn
    Latihan-1.py
    Latihan-2.py
    Latihan-3.py
    Latihan-4.py
    Latihan-5.py
    Latihan-6.py
    Latihan-7.py
    Latihan-8.py
  iN Hejar
  LOGI
  LOGI copy
  Name Nexus
  Name OliX
  Name TryA
  Name TryB
  OUTLINE
  TIMELINE

celcius_pro.py
1 class Celsius :
2     def to_fahrenheit(celsius):
3         return (celsius * 9/5) + 32
4
5     def to_reamur(celsius):
6         return celsius * 4/5
7
8     def to_kelvin(celsius):
9         return celsius + 273.15
10
11 print("|  CONVERTER  CELSIUS_PRO  |\n")
12
13 # Memanggil metode statis to_fahrenheit() di dalam class Celsius
14 print("Fahrenheit = ",Celsius.to_fahrenheit(13))
15
16 # Memanggil metode statis to_reamur() di dalam class Celsius
17 print("Reamur = ",Celsius.to_reamur(13))
18
19 # Memanggil metode statis to_kelvin() di dalam class Celsius
20 print("Kelvin = ",Celsius.to_kelvin(13))
21
22 print("\n|  RIFKI PRAMAYANDI MAHESA  |")
23 print("|          210511156          |")
24 print("|          KELAS D              |")

OUTPUT
[Running] python -u
"C:\Users\ASUS\Documents\R-DATABASE\Code
For\Einheiyar\celcius_pro.py"
|  CONVERTER  CELSIUS_PRO  |

Fahrenheit = 55.4
Reamur = 10.4
Kelvin = 286.15

|  RIFKI PRAMAYANDI MAHESA  |
|          210511156          |
|          KELAS D              |

[Done] exited with code=0 in 0.356 seconds
```

2. Buatlah Class yang mengimplementasikan Object Oriented Programming, beri nama: celcius_oop.py
- a. Sintaks :

```
class Celsius:
    def __init__(self, temperature):
        self.temperature = temperature

    def to_fahrenheit(self):
        return (self.temperature * 9/5) + 32

    def to_kelvin(self):
        return self.temperature + 273

    def to_reamur(self):
        return self.temperature * 4/5

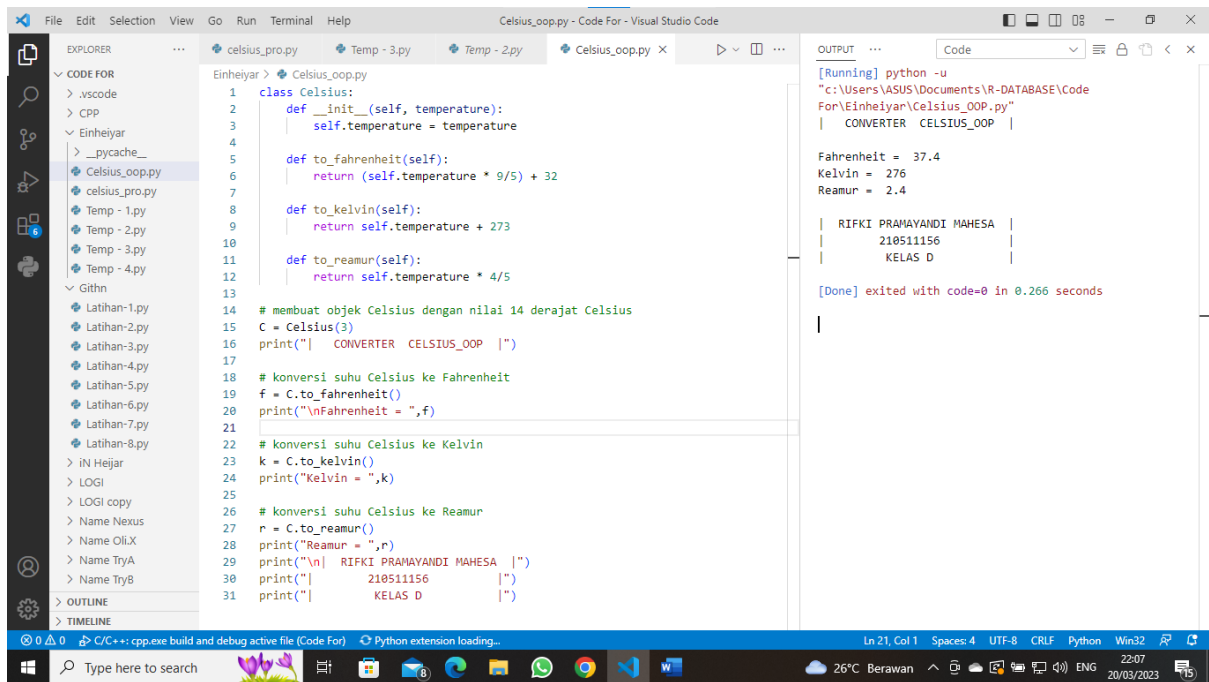
# membuat objek Celsius dengan nilai 14 derajat Celsius
C = Celsius(3)
print("|   CONVERTER   CELSIUS_OOP   |")

# konversi suhu Celsius ke Fahrenheit
f = C.to_fahrenheit()
print("\nFahrenheit = ",f)

# konversi suhu Celsius ke Kelvin
k = C.to_kelvin()
print("Kelvin = ",k)

# konversi suhu Celsius ke Reamur
r = C.to_reamur()
print("Reamur = ",r)
print("\n|   RIFKI PRAMAYANDI MAHESA   |")
print("|           210511156           |")
print("|           KELAS D           |")
```

b. Hasil Program :



The screenshot displays the Visual Studio Code interface with a Python file named `Celsius_oop.py` open. The code defines a `Celsius` class with methods for converting Celsius to Fahrenheit, Kelvin, and Reamur. The program also includes a main section that creates a `Celsius` object and performs these conversions.

```
1 class Celsius:
2     def __init__(self, temperature):
3         self.temperature = temperature
4
5     def to_fahrenheit(self):
6         return (self.temperature * 9/5) + 32
7
8     def to_kelvin(self):
9         return self.temperature + 273
10
11    def to_reamur(self):
12        return self.temperature * 4/5
13
14    # membuat objek Celsius dengan nilai 14 derajat Celsius
15    c = Celsius(3)
16    print("    CONVERTER    CELSIUS_OOP    ")
17
18    # konversi suhu Celsius ke Fahrenheit
19    f = c.to_fahrenheit()
20    print("\nFahrenheit = ",f)
21
22    # konversi suhu Celsius ke Kelvin
23    k = c.to_kelvin()
24    print("Kelvin = ",k)
25
26    # konversi suhu Celsius ke Reamur
27    r = c.to_reamur()
28    print("Reamur = ",r)
29    print("\n    RIFKI PRAMAYANDI MAHESA    ")
30    print("    210511156    ")
31    print("    KELAS D    ")

```

The OUTPUT window shows the execution results:

```
[Running] python -u
"C:\Users\ASUS\Documents\R-DATABASE\Code
For\Einheiyar\Celsius_OOP.py"
|    CONVERTER    CELSIUS_OOP    |

Fahrenheit = 37.4
Kelvin = 276
Reamur = 2.4

|    RIFKI PRAMAYANDI MAHESA    |
|    210511156    |
|    KELAS D    |

[Done] exited with code=0 in 0.266 seconds

```

The status bar at the bottom indicates the file is being built and debugged by C/C++ and Python extensions.