LAPORAN PRAKTIKUM

PEMROGRAMAN BERORIENTASI OBJEK LANJUT

2023

Prepared By:

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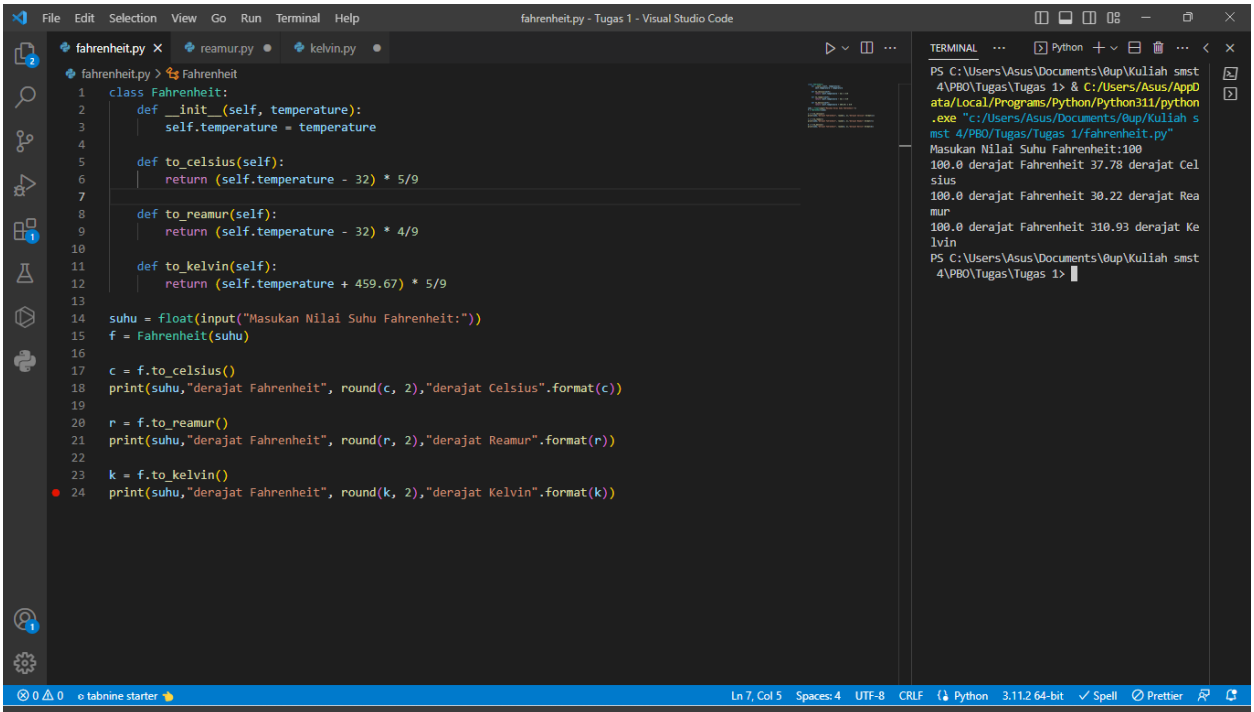
Kelas : K1

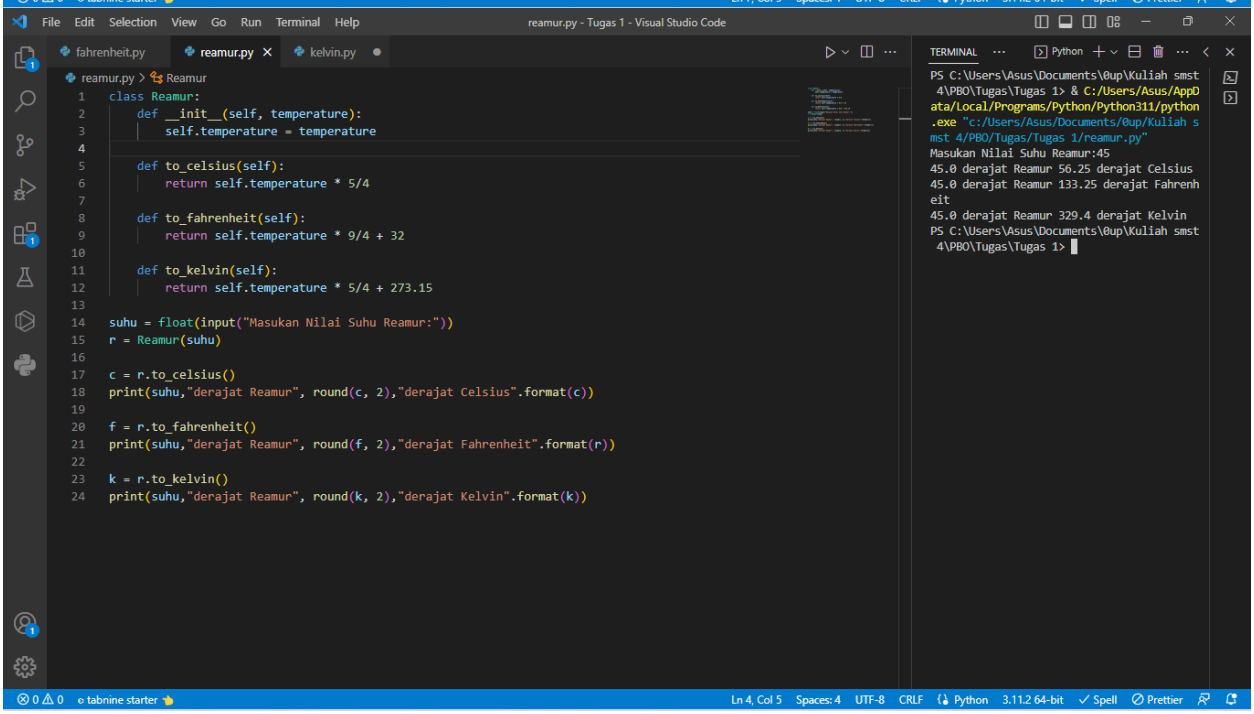
Buatlah 3 buah class (Fahrenheit, Reamur, dan Kelvin yang mengimplementasikan OOP dimana setiap class memiliki kemampuan untuk melakukan konversi ke Temperatur yang lain.

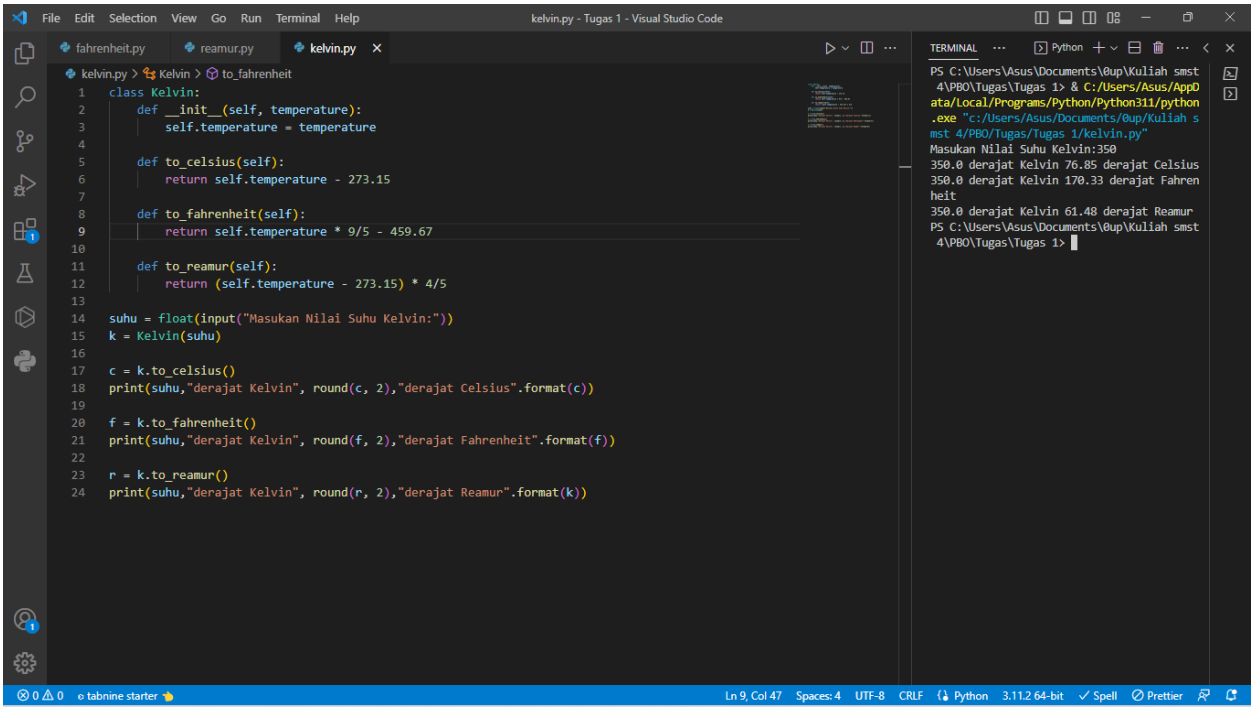
Script

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

    def to_celsius(self):
        return (self.temperature - 32) * 5/9

    def to_reamur(self):
        return (self.temperature - 32) * 4/9

    def to_kelvin(self):
        return (self.temperature + 459.67) * 5/9

suhu = float(input("Masukan Nilai Suhu Fahrenheit:"))
f = Fahrenheit(suhu)

c = f.to_celsius()
print(suhu,"derajat Fahrenheit", round(c, 2),"derajat Celsius".format(c))

r = f.to_reamur()
print(suhu,"derajat Fahrenheit", round(r, 2),"derajat Reamur".format(r))

k = f.to_kelvin()
print(suhu,"derajat Fahrenheit", round(k, 2),"derajat Kelvin".format(k))



class Reamur:
    def __init__(self, temperature):
        self.temperature = temperature

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

```
    def to_fahrenheit(self):
        return self.temperature * 9/4 + 32

    def to_kelvin(self):
        return self.temperature * 5/4 + 273.15

suhu = float(input("Masukan Nilai Suhu Reamur:"))
r = Reamur(suhu)

c = r.to_celsius()
print(suhu,"derajat Reamur", round(c, 2),"derajat Celsius".format(c))

f = r.to_fahrenheit()
print(suhu,"derajat Reamur", round(f, 2),"derajat Fahrenheit".format(r))

k = r.to_kelvin()
print(suhu,"derajat Reamur", round(k, 2),"derajat Kelvin".format(k))


class Kelvin:
    def __init__(self, temperature):
        self.temperature = temperature

    def to_celsius(self):
        return self.temperature - 273.15

    def to_fahrenheit(self):
        return self.temperature * 9/5 - 459.67

    def to_reamur(self):
        return (self.temperature - 273.15) * 4/5

suhu = float(input("Masukan Nilai Suhu Kelvin:"))
k = Kelvin(suhu)

c = k.to_celsius()
print(suhu,"derajat Kelvin", round(c, 2),"derajat Celsius".format(c))

f = k.to_fahrenheit()
print(suhu,"derajat Kelvin", round(f, 2),"derajat Fahrenheit".format(f))

r = k.to_reamur()
print(suhu,"derajat Kelvin", round(r, 2),"derajat Reamur".format(k))
```


File Edit Selection View Go Run Terminal Help
fahrenheit.py - Tugas 1 - Visual Studio Code
fahrenheit.py
reamur.py
kelvin.py
fahrenheit.py > Fahrenheit
class Fahrenheit:
def __init__(self, temperature):
self.temperature = temperature
def to_celsius(self):
return (self.temperature - 32) * 5/9
def to_reamur(self):
return (self.temperature - 32) * 4/9
def to_kelvin(self):
return (self.temperature + 459.67) * 5/9
suhu = float(input("Masukan Nilai Suhu Fahrenheit:"))
f = Fahrenheit(suhu)
c = f.to_celsius()
print(suhu,"derajat Fahrenheit", round(c, 2),"derajat Celsius".format(c))
r = f.to_reamur()
print(suhu,"derajat Fahrenheit", round(r, 2),"derajat Reamur".format(r))
k = f.to_kelvin()
print(suhu,"derajat Fahrenheit", round(k, 2),"derajat Kelvin".format(k))
TERMINAL
Python
PS C:\Users\Asus\Documents\0up\Kuliah smst 4\PBO\Tugas\Tugas 1> & C:/Users/Asus/AppData/Local/Programs/Python/Python311/python.exe "c:/Users/Asus/Documents/0up/Kuliah smst 4/PBO/Tugas/Tugas 1/fahrenheit.py"
Masukan Nilai Suhu Fahrenheit:100
100.0 derajat Fahrenheit 37.78 derajat Celsius
100.0 derajat Fahrenheit 30.22 derajat Reamur
100.0 derajat Fahrenheit 310.93 derajat Kelvin
PS C:\Users\Asus\Documents\0up\Kuliah smst 4\PBO\Tugas\Tugas 1>
0 0 tabnine starter
Ln 7, Col 5 Spaces: 4 UTF-8 CRLF Python 3.11.2 64-bit Spell Prettier


File Edit Selection View Go Run Terminal Help
reamur.py - Tugas 1 - Visual Studio Code
fahrenheit.py
reamur.py
kelvin.py
reamur.py > Reamur
class Reamur:
def __init__(self, temperature):
self.temperature = temperature
def to_celsius(self):
return self.temperature * 5/4
def to_fahrenheit(self):
return self.temperature * 9/4 + 32
def to_kelvin(self):
return self.temperature * 5/4 + 273.15
suhu = float(input("Masukan Nilai Suhu Reamur:"))
r = Reamur(suhu)
c = r.to_celsius()
print(suhu,"derajat Reamur", round(c, 2),"derajat Celsius".format(c))
f = r.to_fahrenheit()
print(suhu,"derajat Reamur", round(f, 2),"derajat Fahrenheit".format(r))
k = r.to_kelvin()
print(suhu,"derajat Reamur", round(k, 2),"derajat Kelvin".format(k))
TERMINAL
Python
PS C:\Users\Asus\Documents\0up\Kuliah smst 4\PBO\Tugas\Tugas 1> & C:/Users/Asus/AppData/Local/Programs/Python/Python311/python.exe "c:/Users/Asus/Documents/0up/Kuliah smst 4/PBO/Tugas/Tugas 1/reamur.py"
Masukan Nilai Suhu Reamur:45
45.0 derajat Reamur 56.25 derajat Celsius
45.0 derajat Reamur 133.25 derajat Fahrenheit
45.0 derajat Reamur 329.4 derajat Kelvin
PS C:\Users\Asus\Documents\0up\Kuliah smst 4\PBO\Tugas\Tugas 1>
0 0 tabnine starter
Ln 4, Col 5 Spaces: 4 UTF-8 CRLF Python 3.11.2 64-bit Spell Prettier


File Edit Selection View Go Run Terminal Help
kelvin.py - Tugas 1 - Visual Studio Code
fahrenheit.py
reamur.py
kelvin.py
kelvin.py > Kelvin > to_fahrenheit
class Kelvin:
def __init__(self, temperature):
self.temperature = temperature
def to_celsius(self):
return self.temperature - 273.15
def to_fahrenheit(self):
return self.temperature * 9/5 - 459.67
def to_reamur(self):
return (self.temperature - 273.15) * 4/5
suhu = float(input("Masukan Nilai Suhu Kelvin:"))
k = Kelvin(suhu)
c = k.to_celsius()
print(suhu,"derajat Kelvin", round(c, 2),"derajat Celsius".format(c))
f = k.to_fahrenheit()
print(suhu,"derajat Kelvin", round(f, 2),"derajat Fahrenheit".format(f))
r = k.to_reamur()
print(suhu,"derajat Kelvin", round(r, 2),"derajat Reamur".format(k))
TERMINAL
Python
PS C:\Users\Asus\Documents\0up\Kuliah smst 4\PBO\Tugas\Tugas 1> & C:/Users/Asus/AppData/Local/Programs/Python/Python311/python.exe "c:/Users/Asus/Documents/0up/Kuliah smst 4/PBO/Tugas/Tugas 1/kelvin.py"
Masukan Nilai Suhu Kelvin:350
350.0 derajat Kelvin 76.85 derajat Celsius
350.0 derajat Kelvin 170.33 derajat Fahrenheit
350.0 derajat Kelvin 61.48 derajat Reamur
PS C:\Users\Asus\Documents\0up\Kuliah smst 4\PBO\Tugas\Tugas 1>
Ln 9, Col 47 Spaces: 4 UTF-8 CRLF Python 3.11.2 64-bit Spell Prettier