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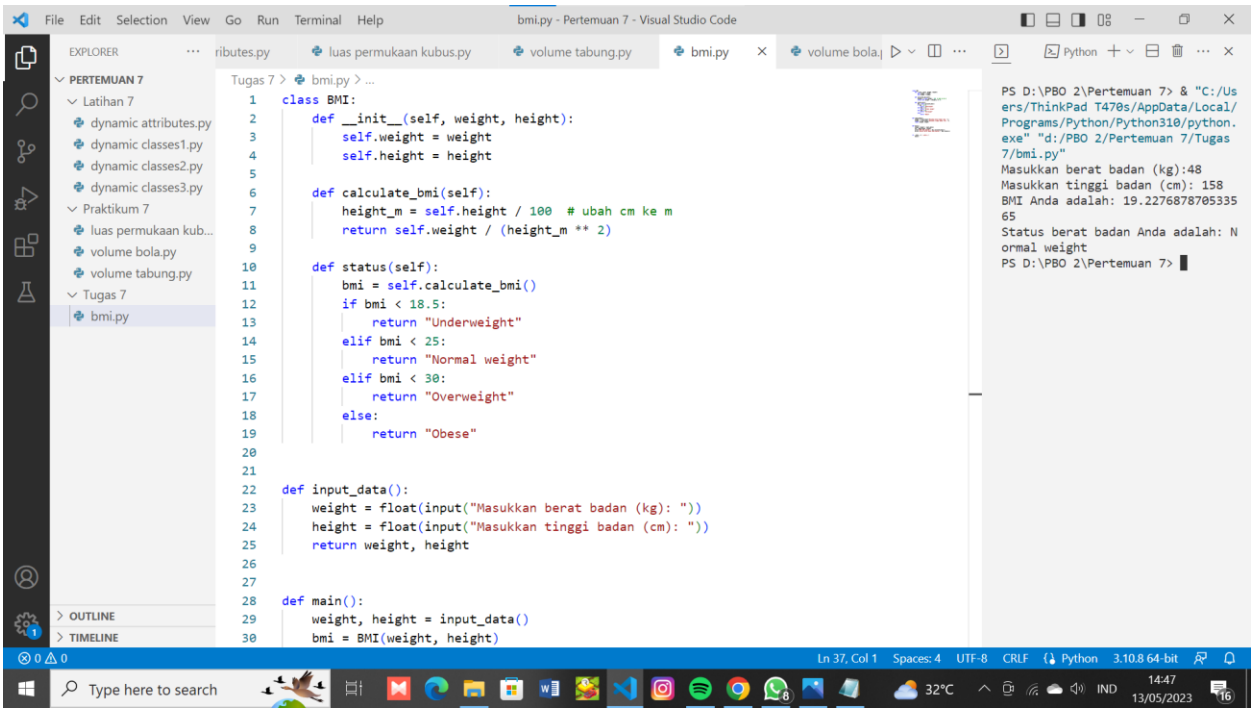
Tugas 7 (Buatlah aplikasi untuk menentukan Berat Badan Ideal (BMI) menggunakan teknik Metaprogramming)

Script :

```
class BMI:
    def __init__(self, weight, height):
        self.weight = weight
        self.height = height

    def calculate_bmi(self):
        height_m = self.height / 100  # ubah cm ke m
        return self.weight / (height_m ** 2)

    def status(self):
        bmi = self.calculate_bmi()
        if bmi < 18.5:
            return "Underweight"
        elif bmi < 25:
            return "Normal weight"
        elif bmi < 30:
            return "Overweight"
        else:
            return "Obese"


def input_data():
    weight = float(input("Masukkan berat badan (kg): "))
    height = float(input("Masukkan tinggi badan (cm): "))
    return weight, height


def main():
    weight, height = input_data()
    bmi = BMI(weight, height)
    print("BMI Anda adalah:", bmi.calculate_bmi())
    print("Status berat badan Anda adalah:", bmi.status())


if __name__ == "__main__":
    main()
```

Output :


File Edit Selection View Go Run Terminal Help
bmi.py - Pertemuan 7 - Visual Studio Code
EXPLORER
PERTEMUAN 7
Latihan 7
dynamic attributes.py
dynamic classes1.py
dynamic classes2.py
dynamic classes3.py
Praktikum 7
luas permukaan kub...
volume bola.py
volume tabung.py
Tugas 7
bmi.py
OUTLINE
TIMELINE
ributes.py
luas permukaan kubus.py
volume tabung.py
bmi.py
volume bola.
Tugas 7 > bmi.py > ...
1 class BMI:
2 def __init__(self, weight, height):
3 self.weight = weight
4 self.height = height
5
6 def calculate_bmi(self):
7 height_m = self.height / 100 # ubah cm ke m
8 return self.weight / (height_m ** 2)
9
10 def status(self):
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24 height = float(input("Masukkan tinggi badan (cm): "))
25 return weight, height
26
27
28 def main():
29 weight, height = input_data()
30 bmi = BMI(weight, height)
Python
PS D:\PBO 2\Pertemuan 7> & "C:/Users/ThinkPad T470s/AppData/Local/Programs/Python/Python310/python.exe" "d:/PBO 2/Pertemuan 7/Tugas 7/bmi.py"
Masukkan berat badan (kg):48
Masukkan tinggi badan (cm): 158
BMI Anda adalah: 19.2276878705335 65
Status berat badan Anda adalah: Normal weight
PS D:\PBO 2\Pertemuan 7>
Ln 37, Col 1 Spaces: 4 UTF-8 CRLF Python 3.10.8 64-bit
Type here to search
32°C
IND
14:47
13/05/2023