

LAPORAN PRAKTIKUM

PEMROGRAMAN BERORIENTASI OBJEK LANJUT

2023



Prepared By:

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Bmimeta.py

#Nama : ALI MABRUR MUBAROK

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```
class BodyMassIndexMeta(type):
```

```
    def __init__(cls, name, bases, attrs):
        super().__init__(name, bases, attrs)
        cls.tb_standar = ""
```

```
    def to_pria(cls, tb):
        return (tb - 100) - ((tb - 100) * (10/100))
```

```
    def to_wanita(cls, tb):
        return (tb - 100) - ((tb - 100) * (15/100))
```

```
class Bmi(metaclass=BodyMassIndexMeta):
```

```
    def __init__(self, tb, bb):
        self.tb = tb
        self.bb = bb
```

```
    def ke_unit(self, unit):
        if unit == "Pria":
            self.tb = self.__class__.to_pria(self.tb)
            self.__class__.tb_standar = "(Kg) Pria"
```

```
elif unit == "Wanita":  
    self.tb = self.__class__.to_wanita(self.tb)  
    self.__class__.tb_standar = "(Kg) Wanita"  
elif unit == "Bmi":  
    pass # do nothing  
else:  
    raise ValueError(f"Unit {unit} tidak dikenal.")
```

```
def mutu(self):
```

```
    bmikalkulator = (self.bb / (self.tb/100*2))  
    if bmikalkulator < 18.5:  
        return bmikalkulator, "KURUS"  
    elif bmikalkulator >= 18.5:  
        return bmikalkulator, "NORMAL"  
    elif bmikalkulator >= 24.9:  
        return bmikalkulator, "GEMUK"  
    else:  
        return bmikalkulator, "OBESITAS LALALA"
```

```
def __repr__(self):  
    return f"{self.tb:.2f} {self.__class__.tb_standar}"
```

```
# Membuat objek tb dengan nilai 100 Bmi
```

```
c = Bmi(160, 65)
```

```
b = c.mutu()
```

```
# Mengubah objek tb menjadi Fahrenheit
```

```
c.ke_unit("Pria")
```

```
print("Berat Ideal Anda :",c)
```

```
print("Hasil BMI Anda Adalah:",b)
```

The screenshot shows a Visual Studio Code window with the file `bmimeta.py` open. The code defines a `BodyMassIndexMeta` class and a `Bmi` class that inherits from it. The `Bmi` class has methods to calculate BMI for men and women based on weight (`tb`) and height (`bb`). The terminal output shows the execution of the script, displaying the user's name, weight, height, and the calculated BMI result.

```
bmimeta.py - PEMROGRAMAN BERORIENTASI OBJEK LANJUT - Visual Studio Code

EXPLORER
  OPEN EDITORS
    PEMROGRAMAN BERORIENTASI OBJE...
      Asa
      Pertemuan 1
      Pertemuan 2
      Pertemuan 3
      Pertemuan 4
      Pertemuan 5
      Pertemuan 6
      Pertemuan 6 PBO2.pdf
      Pertemuan 7
        bmimeta.py
        dnmccattrb.py
        dnmcciss.py
        dnmcciss2.py
        dnmcciss3.py
        praktikum1.py
        praktikum2.py
        praktikum3.py

  bmimeta.py
    1 #Nama : ALI MABRUR MUBAROK
    2 #Nim : 210511112
    3 #Kelas : R3 / TI21C
    4
    5 class BodyMassIndexMeta(type):
    6     def __init__(cls, name, bases, attrs):
    7         super().__init__(name, bases, attrs)
    8         cls.tb_standar = ""
    9
    10     def to_pria(cls, tb):
    11         return (tb - 100) - ((tb - 100) * (10/100))
    12
    13     def to_wanita(cls, tb):
    14         return (tb - 100) - ((tb - 100) * (15/100))
    15
    16 class Bmi(metaclass=BodyMassIndexMeta):
    17     def __init__(self, tb, bb):
    18         self.tb = tb
    19         self.bb = bb
    20
    21     def ke_unit(self, unit):
    22         if unit == "Pria":
    23             self.tb = self.__class__.to_pria(self.tb)
    24             self.__class__.tb_standar = "(Kg) Pria"
    25         elif unit == "Wanita":
    26             self.tb = self.__class__.to_wanita(self.tb)
    27             self.__class__.tb_standar = "(Kg) Wanita"
    28         elif unit == "Bmi":
    29             pass # do nothing
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  PROBLEMS
  OUTPUT
  DEBUG CONSOLE
  TERMINAL
    PS D:\FILE MANAGER\VALI MABRUR MUBAROK\SEMESTER 4\PEMROGRAMAN BERORIENTASI OBJEK LANJUT> & "C:/Users/Bless Com/AppData/Local/Programs/Python/Python310/python.exe" "d:/FILE MANAGE
    R/ALI MABRUR MUBAROK/SEMESTER 4/PEMROGRAMAN BERORIENTASI OBJEK LANJUT/Pertemuan 7/praktikum3.py"
    Luas Ketupat: 10.0
    Volume Ketupat: 70.0
    PS D:\FILE MANAGER\VALI MABRUR MUBAROK\SEMESTER 4\PEMROGRAMAN BERORIENTASI OBJEK LANJUT> & "C:/Users/Bless Com/AppData/Local/Programs/Python/Python310/python.exe" "d:/FILE MANAGE
    R/ALI MABRUR MUBAROK/SEMESTER 4/PEMROGRAMAN BERORIENTASI OBJEK LANJUT/Pertemuan 7/bmimeta.py"
    Berat Ideal Anda : 54.00 (Kg) Pria
    Hasil BMI Anda Adalah: (20.3125, 'NORMAL')
    PS D:\FILE MANAGER\VALI MABRUR MUBAROK\SEMESTER 4\PEMROGRAMAN BERORIENTASI OBJEK LANJUT>
```