

LAPORAN PRAKTIKUM

PEMROGRAMAN BERORIENTASI OBJEK LANJUT

2023



Prepared By:

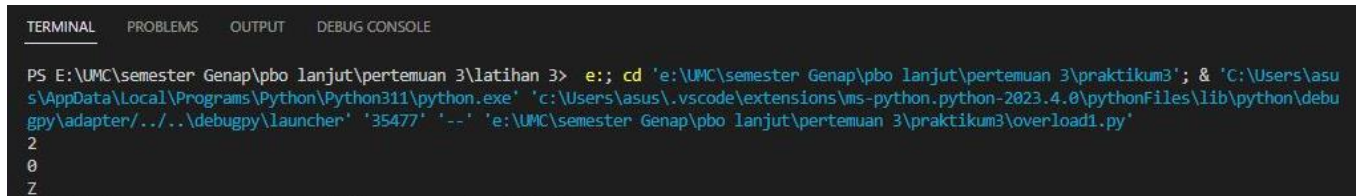
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TI21K

Buatlah masing-masing 2 contoh polymorphism statis (overload) dan polymorphism dinamis (overriding). Beri nama overload1.py, overload2, overriding1.py, overriding2.py

overload1.py

```
print(min(100, 2, 5, 100, 3000, 50))
print(min([1, 2, 3, 4, 0]))
print(min("Zebra"))
```

Gambar 1. Output overload1.py



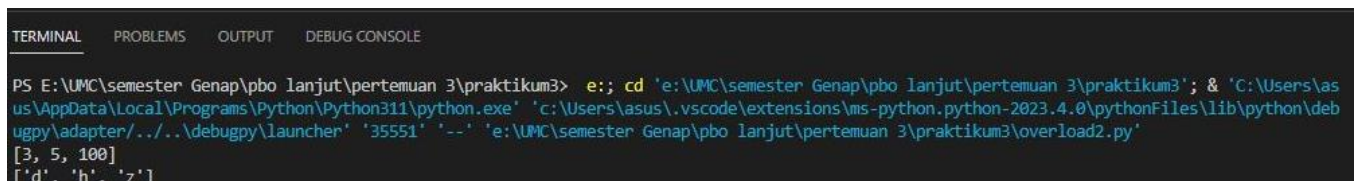
```
PS E:\UMC\semester Genap\pbo lanjut\pertemuan 3\latihan 3> e:: cd 'e:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3'; & 'C:\Users\asus\AppData\Local\Programs\Python\Python311\python.exe' 'c:\Users\asus\.vscode\extensions\ms-python.python-2023.4.0\pythonFiles\lib\python\debugpy\adapter/../../debugpy/launcher' '35477' '--' 'e:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3\overload1.py'
2
0
Z
```

overload2.py

```
a = [100, 5, 3]
a.sort()
print(a)

b = ["z", "d", "h"]
b.sort()
print(b)
```

Gambar 2. Output overload2.py



```
PS E:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3> e:: cd 'e:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3'; & 'C:\Users\asus\AppData\Local\Programs\Python\Python311\python.exe' 'c:\Users\asus\.vscode\extensions\ms-python.python-2023.4.0\pythonFiles\lib\python\debugpy\adapter/../../debugpy/launcher' '35551' '--' 'e:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3\overload2.py'
[3, 5, 100]
['d', 'h', 'z']
```

Overriding1.py

```
class kendaraan:
    def move(self):
        print("kendaraan berjalan")

class mobil(kendaraan):
    def move(self):
        print("mobil berjalan")

class motor(kendaraan):
    def move(self):
        print("motor berjalan")

K = kendaraan()
M = mobil()
Mo = motor()
```

```
K.move()
M.move()
Mo.move()
```

Gambar 3. Output overriding1.py

```
TERMINAL  PROBLEMS  OUTPUT  DEBUG CONSOLE

PS E:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3> e;; cd 'e:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3'; & 'C:\Users\asus\AppData\Local\Programs\Python\Python311\python.exe' 'c:\Users\asus\.vscode\extensions\ms-python.python-2023.4.0\pythonFiles\lib\python\debugpy\adapter\..\..\debugpy\launcher' '35610' '--' 'e:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3\overriding1.py'
kendaraan berjalan
mobil berjalan
motor berjalan
```

Overriding2.py

```
from abc import ABC, abstractmethod

class kendaraan(ABC):
    @abstractmethod
    def start(self):
        pass

class mobil(kendaraan):
    def start(self):
        print("mobil dinyalakan dengan cara di starter")

class motor(kendaraan):
    def start(self):
        print("motor dinyalakan dengan cara disela")

class traktor(kendaraan):
    def start(self):
        print("traktor dinyalakan dengan cara di starter")

M = mobil()
Mo = motor()
T = traktor()

M.start()
Mo.start()
T.start()
```

Gambar 4. Output overriding2.py

```
TERMINAL  PROBLEMS  OUTPUT  DEBUG CONSOLE

PS E:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3> e;; cd 'e:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3'; & 'C:\Users\asus\AppData\Local\Programs\Python\Python311\python.exe' 'c:\Users\asus\.vscode\extensions\ms-python.python-2023.4.0\pythonFiles\lib\python\debugpy\adapter\..\..\debugpy\launcher' '35676' '--' 'e:\UMC\semester Genap\pbo lanjut\pertemuan 3\praktikum3\overriding2.py'
mobil dinyalakan dengan cara di starter
motor dinyalakan dengan cara disela
traktor dinyalakan dengan cara di starter
```

