

LAPORAN PRAKTIKUM

PEMROGRAMAN BERORIENTASI OBJEK LANJUT

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Tugas Praktikum 3 :

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

1. Statis(overload)

A. Overload 1

```
class Hewan:
    def suara(self):
        pass

class Kucing(Hewan):
    def suara(self):
        return "Meong"

class Anjing(Hewan):
    def suara(self):
        return "Guk Guk"

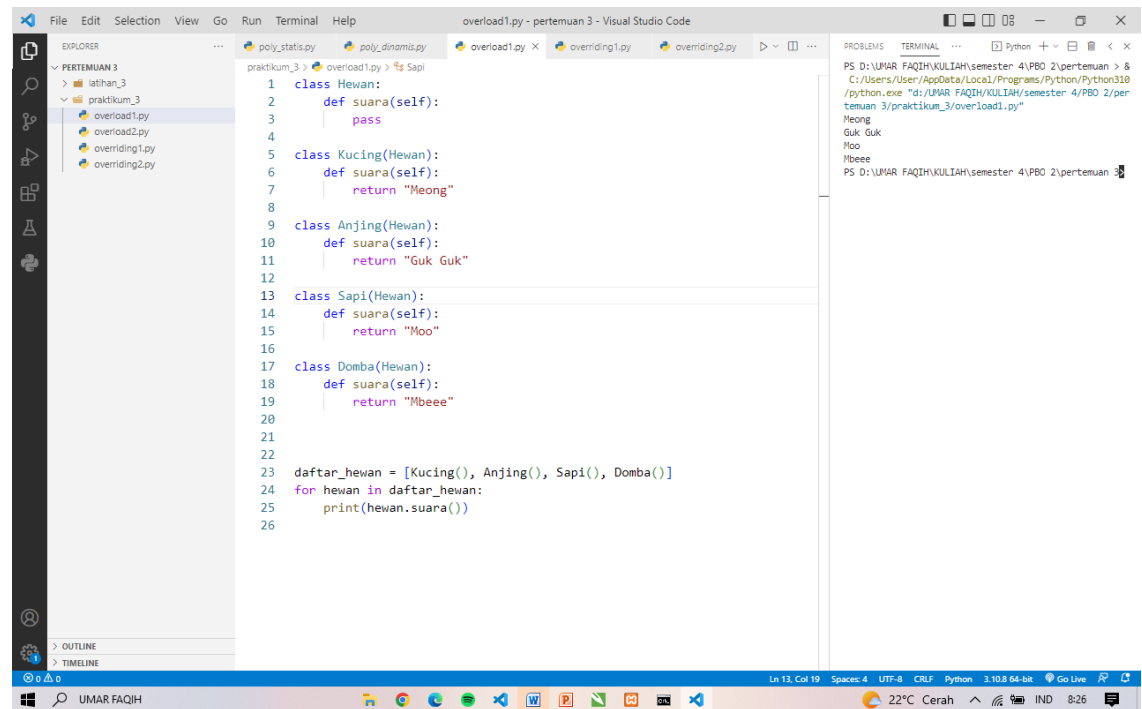
class Sapi(Hewan):
    def suara(self):
        return "Moo"

class Domba(Hewan):
    def suara(self):
        return "Mbeee"

daftar_hewan = [Kucing(), Anjing(), Sapi(), Domba()]

for hewan in daftar_hewan:
    print(hewan.suara())
```

Hasil :



The screenshot shows a Visual Studio Code editor with a Python file named `overload1.py` open. The code defines a base class `Hewan` with a `suara(self)` method that does nothing (`pass`). It then defines three subclasses: `Kucing` (returns "Meong"), `Anjing` (returns "Guk Guk"), and `Sapi` (returns "Moo"). A list `daftar_hewan` contains instances of these classes, and a loop prints the sound of each. The terminal window on the right shows the output: "Meong", "Guk Guk", "Moo", and "Mbeee".

```
1 class Hewan:
2     def suara(self):
3         pass
4
5 class Kucing(Hewan):
6     def suara(self):
7         return "Meong"
8
9 class Anjing(Hewan):
10    def suara(self):
11        return "Guk Guk"
12
13 class Sapi(Hewan):
14    def suara(self):
15        return "Moo"
16
17 class Domba(Hewan):
18    def suara(self):
19        return "Mbeee"
20
21
22
23 daftar_hewan = [Kucing(), Anjing(), Sapi(), Domba()]
24 for hewan in daftar_hewan:
25     print(hewan.suara())
26
```

Terminal Output:

```
PS D:\UMAR FAQIH\KULIAH\semester 4\PB0 2\pertemuan 3> & C:/Users/UMAR FAQIH/KULIAH/semester 4/PB0 2/pertemuan 3/praktikum_3/overload1.py
Meong
Guk Guk
Moo
Mbeee
PS D:\UMAR FAQIH\KULIAH\semester 4\PB0 2\pertemuan 3>
```

B. Overload 2

```
class Hewan:
    def suara(self):
        pass

class Kucing(Hewan):
    def suara(self):
        return "Meong"

class Anjing(Hewan):
    def suara(self):
        return "Guk Guk"

class Sapi(Hewan):
    def suara(self):
```

```

        return "Moo"

class Domba(Hewan):
    def suara(self):
        return "Mbeee"

daftar_hewan = [Kucing(), Anjing(), Sapi(), Domba()]

for hewan in daftar_hewan:
    print(hewan.suara())

```

Hasil :

The screenshot shows a Visual Studio Code editor window with the file 'overload2.py' open. The code defines a base class 'Ucapan' and four subclasses: 'Pagi', 'Siang', 'Sore', and 'Malam'. Each subclass has a 'suara' method that returns a specific greeting. A list 'daftar_ucapan' is created containing instances of these subclasses, and a loop prints the 'suara' attribute of each instance.

```

1 class Ucapan:
2     def suara(self):
3         pass
4
5 class Pagi(Ucapan):
6     def suara(self):
7         return "Selamat Pagi"
8
9 class Siang(Ucapan):
10    def suara(self):
11        return "Selamat Siang"
12
13 class Sore(Ucapan):
14    def suara(self):
15        return "Selamat Sore"
16
17 class Malam(Ucapan):
18    def suara(self):
19        return "Selamat Malam"
20
21
22
23 daftar_ucapan = [Pagi(), Siang(), Sore(), Malam()]
24 for ucapan in daftar_ucapan:
25     print(ucapan.suara())
26

```

The terminal on the right shows the output of the script:

```

PS D:\UMAR FAQIH\KULIAH\semester 4\PSO 2\pertemuan 3> &
C:\Users\User\AppData\Local\Programs\Python\Python310
/python.exe "d:\UMAR FAQIH\KULIAH\semester 4\PSO 2\per
temuan 3/praktikum_3/overload2.py"
Selamat Pagi
Selamat Siang
Selamat Sore
Selamat Malam
PS D:\UMAR FAQIH\KULIAH\semester 4\PSO 2\pertemuan 3

```

2. Dinamis (Overriding)

A. Overriding 1

```
class Hewan:
    def suara(self):
        pass

class Kucing(Hewan):
    def suara(self):
        return "Meong"

class Anjing(Hewan):
    def suara(self):
        return "Guk Guk"

class Sapi(Hewan):
    def suara(self):
        return "Moo"

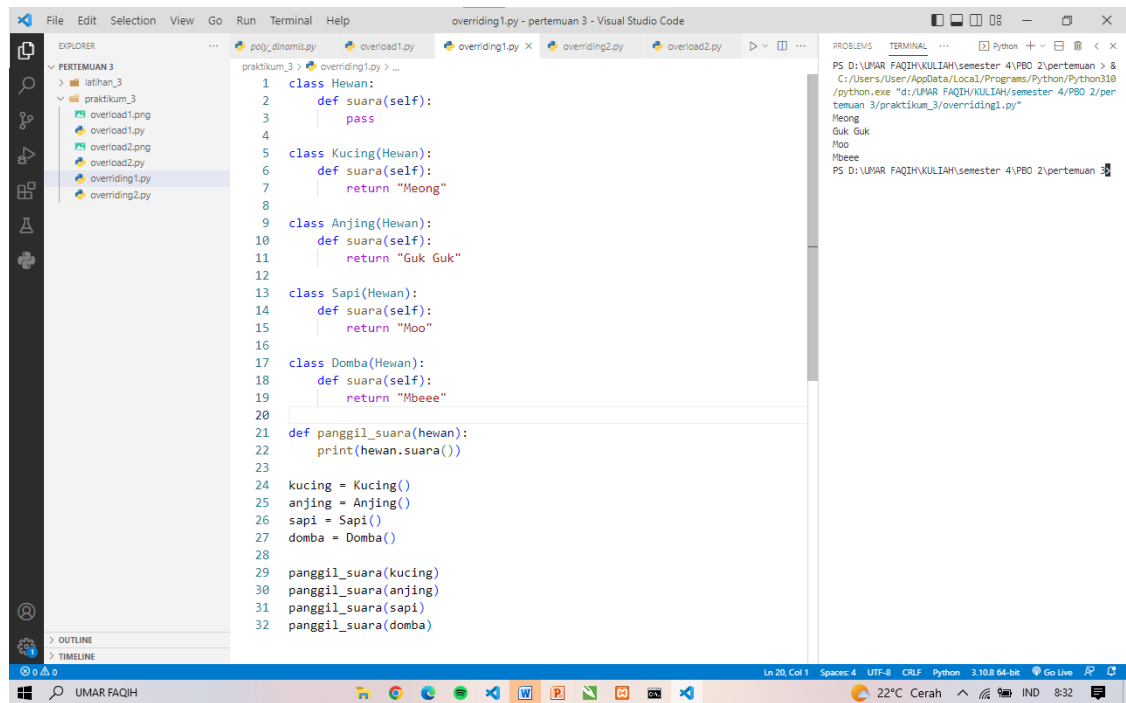
class Domba(Hewan):
    def suara(self):
        return "Mbeee"

def panggil_suara(hewan):
    print(hewan.suara())

kucing = Kucing()
anjing = Anjing()
sapi = Sapi()
domba = Domba()

panggil_suara(kucing)
panggil_suara(anjing)
panggil_suara(sapi)
panggil_suara(domba)
```

Hasil :



```
1 class Hewan:
2     def suara(self):
3         pass
4
5 class Kucing(Hewan):
6     def suara(self):
7         return "Meong"
8
9 class Anjing(Hewan):
10    def suara(self):
11        return "Guk Guk"
12
13 class Sapi(Hewan):
14    def suara(self):
15        return "Moo"
16
17 class Domba(Hewan):
18    def suara(self):
19        return "Mbeee"
20
21 def panggil_suara(hewan):
22     print(hewan.suara())
23
24 kucing = Kucing()
25 anjing = Anjing()
26 sapi = Sapi()
27 domba = Domba()
28
29 panggil_suara(kucing)
30 panggil_suara(anjing)
31 panggil_suara(sapi)
32 panggil_suara(domba)
```

Terminal Output:

```
PS D:\UMAR FAQIH\KULIAH\semester 4\PSO 2\pertemuan 3> &
C:/Users/User/AppData/Local/Programs/Python/Python310
/python.exe "d:/UMAR FAQIH/KULIAH/semester 4/PSO 2/per
temuan 3/praktikum_3/overriding1.py"
Meong
Guk Guk
Moo
Mbeee
PS D:\UMAR FAQIH\KULIAH\semester 4\PSO 2\pertemuan 3>
```

B. Overriding 2

```
class Ucapan:
    def suara(self):
        pass

class Pagi(Ucapan):
    def suara(self):
        return "Selamat Pagi"

class Siang(Ucapan):
    def suara(self):
        return "Selamat Siang"

class Sore(Ucapan):
    def suara(self):
        return "Selamat Sore"
```

```

class Malam(Ucapan):
    def suara(self):
        return "Selamat Malam"

def panggil_suara(ucapan):
    print(ucapan.suara())

pagi = Pagi()
siang = Siang()
sore = Sore()
malam = Malam()

panggil_suara(pagi)
panggil_suara(siang)
panggil_suara(sore)
panggil_suara(malam)

```

Hasil :

The screenshot shows a Visual Studio Code window with the file 'overriding2.py' open. The code in the editor is as follows:

```

1 class Ucapan:
2     def suara(self):
3         pass
4
5 class Pagi(Ucapan):
6     def suara(self):
7         return "Selamat Pagi"
8
9 class Siang(Ucapan):
10    def suara(self):
11        return "Selamat Siang"
12
13 class Sore(Ucapan):
14    def suara(self):
15        return "Selamat Sore"
16
17 class Malam(Ucapan):
18    def suara(self):
19        return "Selamat Malam"
20
21
22 def panggil_suara(ucapan):
23     print(ucapan.suara())
24
25 pagi = Pagi()
26 siang = Siang()
27 sore = Sore()
28 malam = Malam()
29
30 panggil_suara(pagi)
31 panggil_suara(siang)
32 panggil_suara(sore)
33 panggil_suara(malam)

```

The terminal on the right shows the output of the script:

```

PS D:\UMAR FAQIH\KULIAH\semester 4\PSO 2\pertemuan 3> &
C:\Users\User\AppData\Local\Programs\Python\Python310
/python.exe "d:\UMAR FAQIH\KULIAH\semester 4\PSO 2\per
temuan 3/praktikum_3/overriding2.py"
Selamat Pagi
Selamat Siang
Selamat Sore
Selamat Malam
PS D:\UMAR FAQIH\KULIAH\semester 4\PSO 2\pertemuan 3>

```

The status bar at the bottom indicates the file is 'Ln 33, Col 21', has 4 spaces, is UTF-8 encoded, and is a Python 3.10.8 64-bit file. The system tray shows the date and time as 8:33.