

LAPORAN PRAKTIKUM

PEMROGRAMAN BERORIENTASI OBJEK LANJUT

2023



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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"

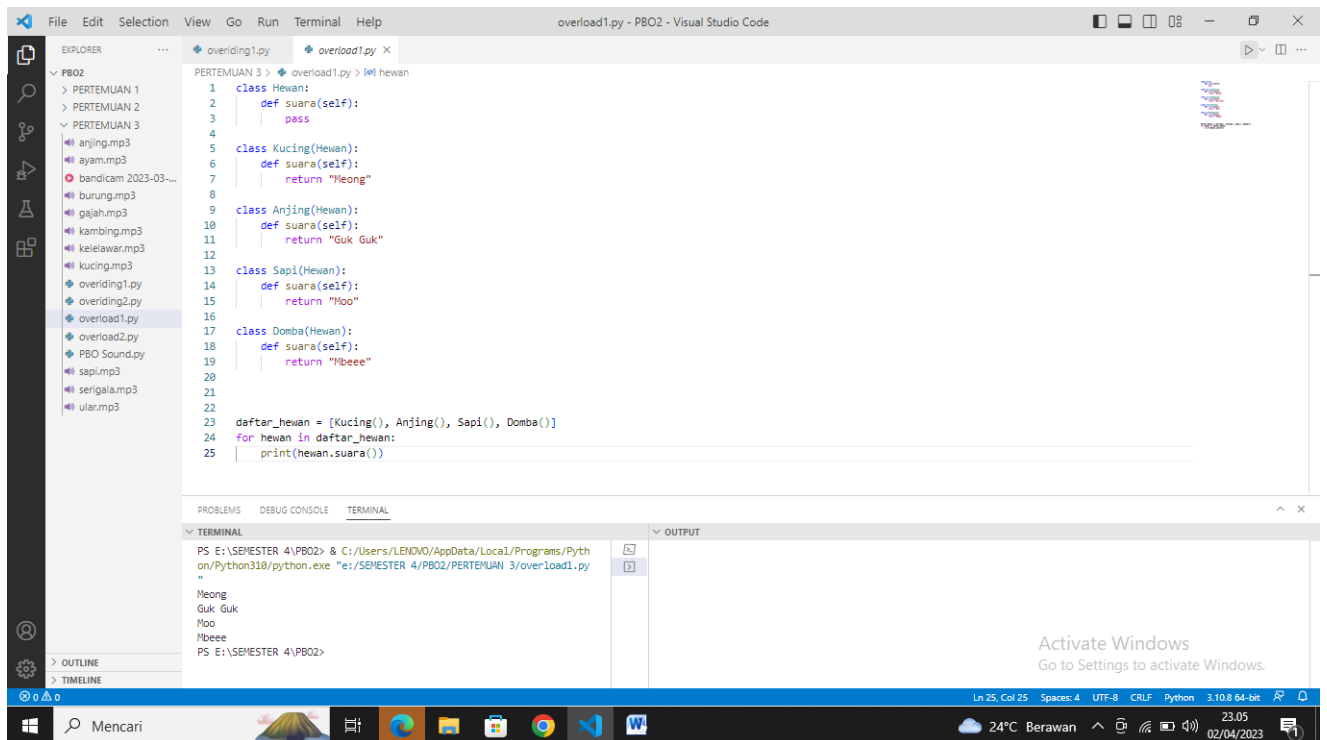
class Sapi(Hewan):
    def suara(self):
        return "Moo"

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

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

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

Hasil :



```
File Edit Selection View Go Run Terminal Help
overload1.py - PBO2 - Visual Studio Code

EXPLORER
PBO2
  > PERTEMUAN 1
  > PERTEMUAN 2
  > PERTEMUAN 3
    anjing.mp3
    ayam.mp3
    bandicam 2023-03-...
    burung.mp3
    gajah.mp3
    kambing.mp3
    kelelawar.mp3
    kucing.mp3
    overriding1.py
    overriding2.py
    overload1.py
    overload2.py
    PBO Sound.py
    sapi.mp3
    serigala.mp3
    ular.mp3

overload1.py
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 "Mbeeee"
20
21
22
23 daftar_hewan = [Kucing(), Anjing(), Sapi(), Domba()]
24 for hewan in daftar_hewan:
25     print(hewan.suara())

TERMINAL
PS E:\SEMESTER 4\PBO2> & C:/Users/LENOVO/AppData/Local/Programs/Python/Python310/python.exe "e:/SEMESTER 4/PBO2/PERTEMUAN 3/overload1.py"
Meong
Guk Guk
Moo
Mbeeee
PS E:\SEMESTER 4\PBO2>
```

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 the Visual Studio Code interface with a file explorer on the left containing a project named 'PBO2'. The main editor window displays a Python script named 'overload2.py' with the following code:

```

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())

```

The bottom panel shows the 'TERMINAL' output, which displays the results of running the script:

```

PS E:\SEMESTER 4\PBO2> & C:/Users/LENOVO/AppData/Local/Programs/Python/Python310/python.exe "e:/SEMESTER 4/PBO2/PERTEMUAN 3/overload2.py"
Selamat Pagi
Selamat Siang
Selamat Sore
Selamat Malam
PS E:\SEMESTER 4\PBO2>

```

The Windows taskbar at the bottom shows the date and time as 23:05 on 02/04/2023, and the location as Berawan with a temperature of 24°C.

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"

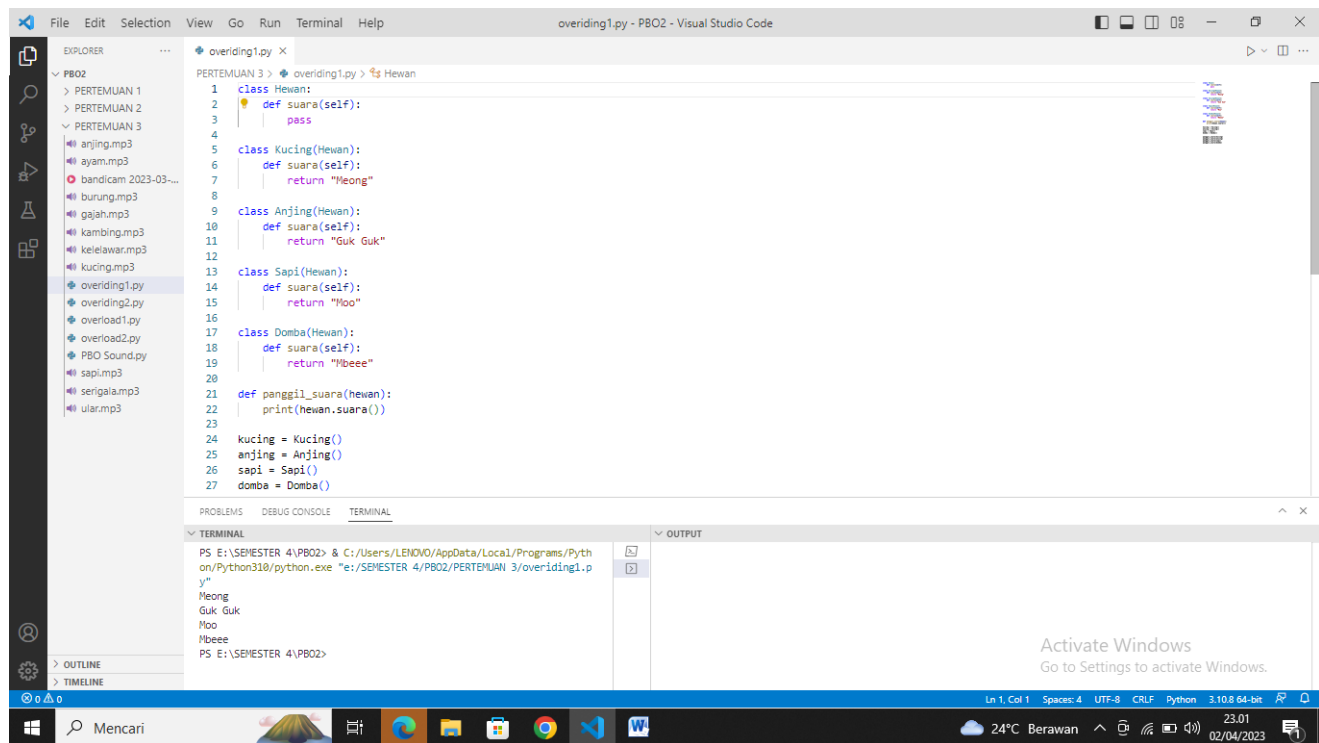
class Domba(Hewan):
    def suara(self):
        return "Mbeee"

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 "Mbbee"
20
21 def panggil_suara(hewan):
22     print(hewan.suara())
23
24 kucing = Kucing()
25 anjing = Anjing()
26 sapi = Sapi()
27 domba = Domba()
```

PS E:\SEMESTER 4\PBO2> & C:/Users/LENOVO/AppData/Local/Programs/Python/Python310/python.exe "e:/SEMESTER 4/PBO2/PERTEMUAN 3/overriding1.py"

Meong
Guk Guk
Moo
Mbbee
PS E:\SEMESTER 4\PBO2>

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 displays the Visual Studio Code interface. The Explorer pane on the left shows a project structure with folders 'PERTEMUAN 1', 'PERTEMUAN 2', and 'PERTEMUAN 3'. The File Explorer shows various audio files like 'anjing.mp3', 'ayam.mp3', 'bandicam 2023-03-...', 'burung.mp3', 'gajah.mp3', 'kambing.mp3', 'kelelawar.mp3', 'kucing.mp3', 'overiding1.py', 'overiding2.py', 'overload1.py', 'overload2.py', 'PBO Sound.py', 'sapi.mp3', 'serigala.mp3', and 'ular.mp3'. The main editor shows the code from the previous block. The TERMINAL pane at the bottom shows the command 'python overriding2.py' and its output: 'Selamat Pagi', 'Selamat Siang', 'Selamat Sore', and 'Selamat Malam'.