

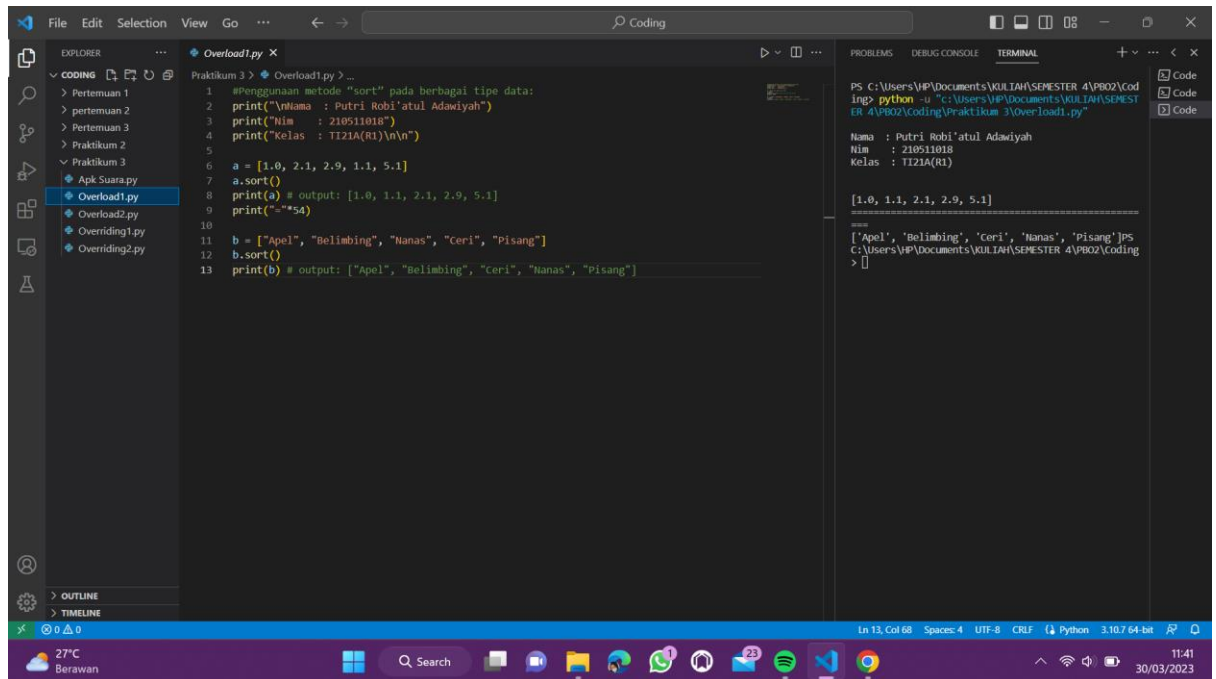
Nama : Putri Robi'atul Adawiyah

Nim : 210511018

Kelas : TI21A (R1)

Praktikum 3 PBO2

1. Overload



The screenshot shows the Visual Studio Code editor with a file named `Overload1.py` open. The file contains Python code demonstrating list sorting. The Explorer sidebar on the left shows a project structure with folders for 'Pertemuan 1' through 'Pertemuan 3' and a 'Praktikum 3' folder containing `Apk Suara.py`, `Overload1.py`, `Overload2.py`, `Overriding1.py`, and `Overriding2.py`. The `Overload1.py` file is selected and its code is visible in the editor. The code defines a list `a` and sorts it using `a.sort()`, then prints the sorted list. It also defines a list `b` and sorts it using `b.sort()`, then prints the sorted list. The output of the program is displayed in the terminal on the right.

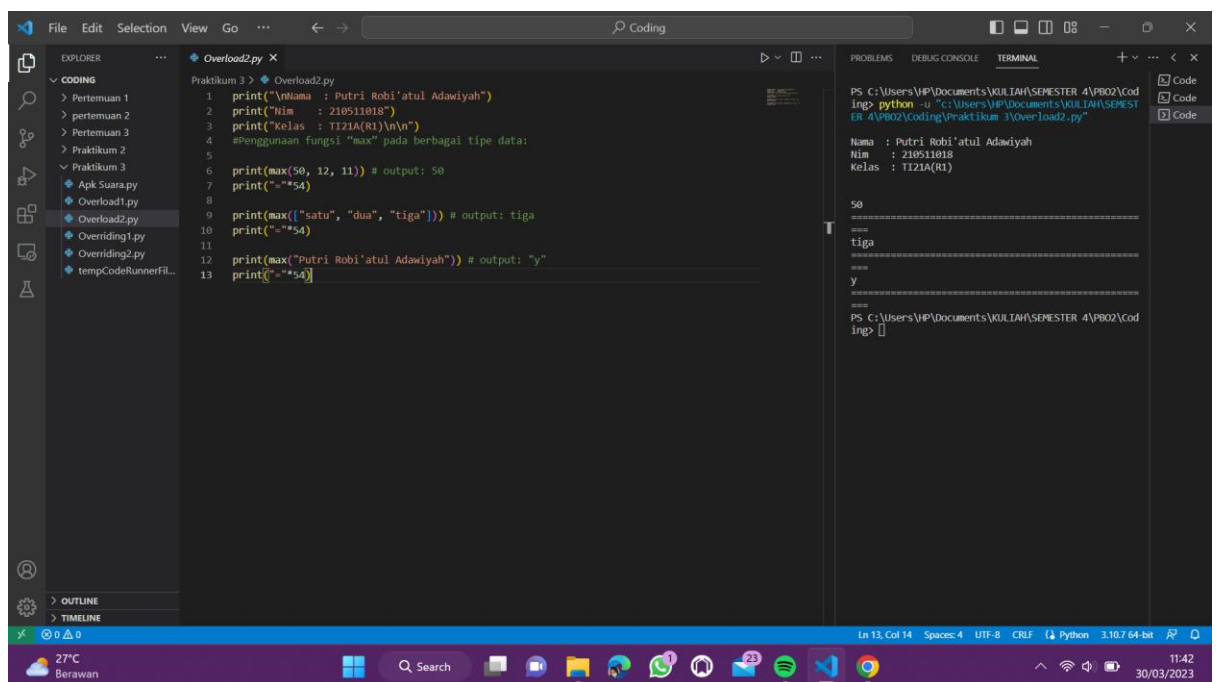
```
1 #Penggunaan metode "sort" pada berbagai tipe data:
2 print("\nNama : Putri Robi'atul Adawiyah")
3 print("Nim : 210511018")
4 print("Kelas : TI21A(R1)\n\n")
5
6 a = [1.0, 2.1, 2.9, 1.1, 5.1]
7 a.sort()
8 print(a) # output: [1.0, 1.1, 2.1, 2.9, 5.1]
9 print("\n*54")
10
11 b = ["Apel", "Belimbing", "Nanas", "Ceri", "Pisang"]
12 b.sort()
13 print(b) # output: ["Apel", "Belimbing", "Ceri", "Nanas", "Pisang"]
```

Terminal Output:

```
PS C:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO2\Coding> python -u "C:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO2\Coding\Praktikum 3\Overload1.py"
Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

[1.0, 1.1, 2.1, 2.9, 5.1]

=====
['Apel', 'Belimbing', 'Ceri', 'Nanas', 'Pisang']PS
C:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO2\Coding>
```



The screenshot shows the Visual Studio Code editor with a file named `Overload2.py` open. The file contains Python code demonstrating the use of the `max` function with different arguments. The Explorer sidebar on the left shows the same project structure as the previous screenshot. The `Overload2.py` file is selected and its code is visible in the editor. The code uses `max` with a list of numbers, a list of strings, and a string, then prints the results. The output of the program is displayed in the terminal on the right.

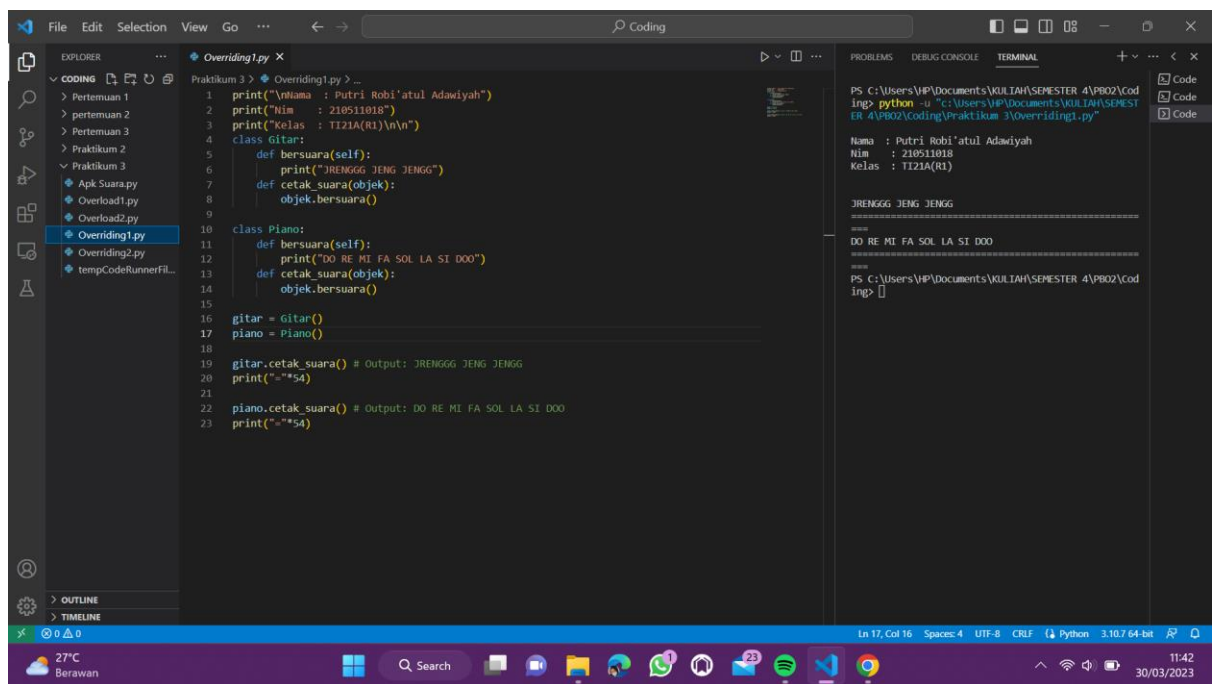
```
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 #Penggunaan fungsi "max" pada berbagai tipe data:
5
6 print(max(50, 12, 11)) # output: 50
7 print("\n*54")
8
9 print(max(["satu", "dua", "tiga"])) # output: tiga
10 print("\n*54")
11
12 print(max("Putri Robi'atul Adawiyah")) # output: "y"
13 print("\n*54")
```

Terminal Output:

```
PS C:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO2\Coding> python -u "C:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO2\Coding\Praktikum 3\Overload2.py"
Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

50
=====
Tiga
=====
y
=====
PS C:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO2\Coding>
```

2. Overriding



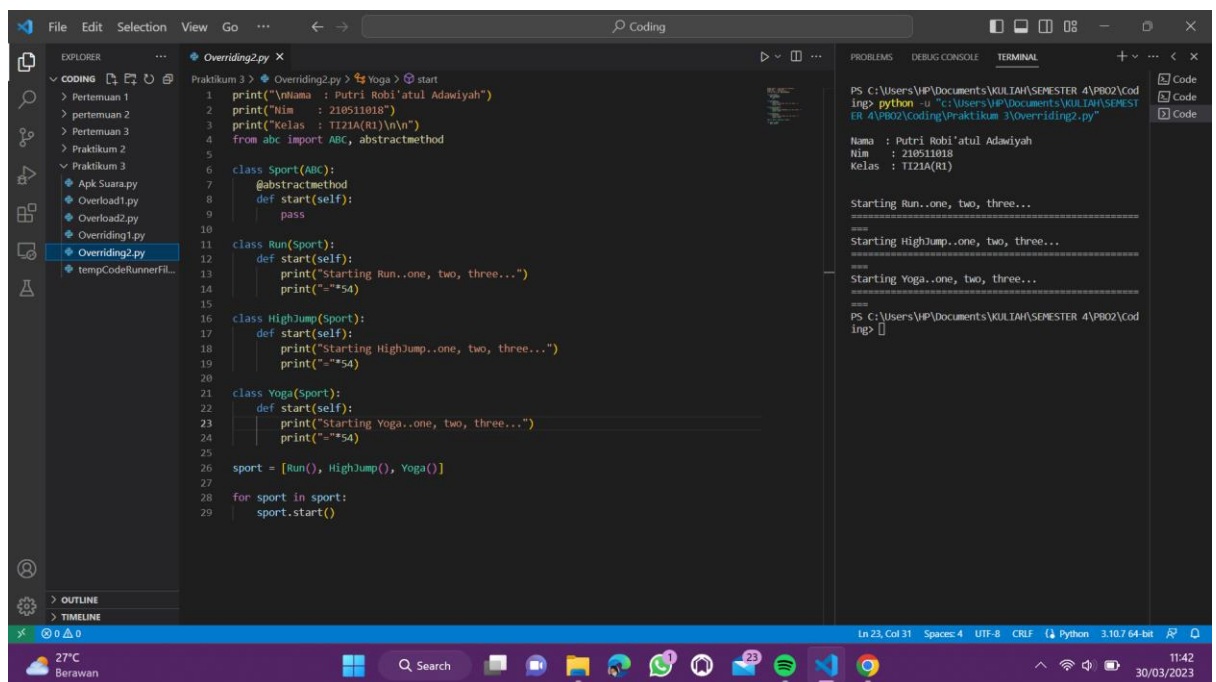
The screenshot shows the Visual Studio Code editor with a file named `Overriding1.py` open. The code defines two classes, `Gitar` and `Piano`, both inheriting from a common base class (implied by the context). The `Gitar` class has a `bersuara` method that prints "JRENGGG JENG JENG". The `Piano` class has a `bersuara` method that prints "DO RE MI FA SOL LA SI DOO". The code also creates instances of both classes and calls their `cetak_suara` methods, which internally call `bersuara`.

```
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class Gitar:
5     def bersuara(self):
6         print("JRENGGG JENG JENG")
7     def cetak_suara(objek):
8         objek.bersuara()
9
10 class Piano:
11     def bersuara(self):
12         print("DO RE MI FA SOL LA SI DOO")
13     def cetak_suara(objek):
14         objek.bersuara()
15
16 gitar = Gitar()
17 piano = Piano()
18
19 gitar.cetak_suara() # Output: JRENGGG JENG JENG
20 print("\n*54")
21
22 piano.cetak_suara() # Output: DO RE MI FA SOL LA SI DOO
23 print("\n*54")
```

The terminal output shows the execution of the script, displaying the names, NIM, and classes of the objects, followed by the sounds produced by each instrument.

```
PS C:\Users\VP\Documents\KULIAH\SEMESTER 4\PROG2\Coding> python -u "c:\Users\VP\Documents\KULIAH\SEMESTER 4\PROG2\Coding\Praktikum 3\Overriding1.py"
Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

JRENGGG JENG JENG
=====
DO RE MI FA SOL LA SI DOO
=====
PS C:\Users\VP\Documents\KULIAH\SEMESTER 4\PROG2\Coding>
```



The screenshot shows the Visual Studio Code editor with a file named `Overriding2.py` open. The code defines a base class `Sport` with an abstract method `start`. Two subclasses, `Run` and `HighJump`, inherit from `Sport` and override the `start` method. The `Run` class prints "Starting Run..one, two, three..." and the `HighJump` class prints "Starting HighJump..one, two, three...". The code also creates instances of both classes and calls their `start` methods.

```
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 from abc import ABC, abstractmethod
5
6 class Sport(ABC):
7     @abstractmethod
8     def start(self):
9         pass
10
11 class Run(Sport):
12     def start(self):
13         print("Starting Run..one, two, three...")
14         print("\n*54")
15
16 class HighJump(Sport):
17     def start(self):
18         print("Starting HighJump..one, two, three...")
19         print("\n*54")
20
21 class Yoga(Sport):
22     def start(self):
23         print("Starting Yoga..one, two, three...")
24         print("\n*54")
25
26 sport = [Run(), HighJump(), Yoga()]
27
28 for sport in sport:
29     sport.start()
```

The terminal output shows the execution of the script, displaying the names, NIM, and classes of the objects, followed by the start sequence for each sport.

```
PS C:\Users\VP\Documents\KULIAH\SEMESTER 4\PROG2\Coding> python -u "c:\Users\VP\Documents\KULIAH\SEMESTER 4\PROG2\Coding\Praktikum 3\Overriding2.py"
Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

Starting Run..one, two, three...
=====
Starting HighJump..one, two, three...
=====
Starting Yoga..one, two, three...
=====
PS C:\Users\VP\Documents\KULIAH\SEMESTER 4\PROG2\Coding>
```