

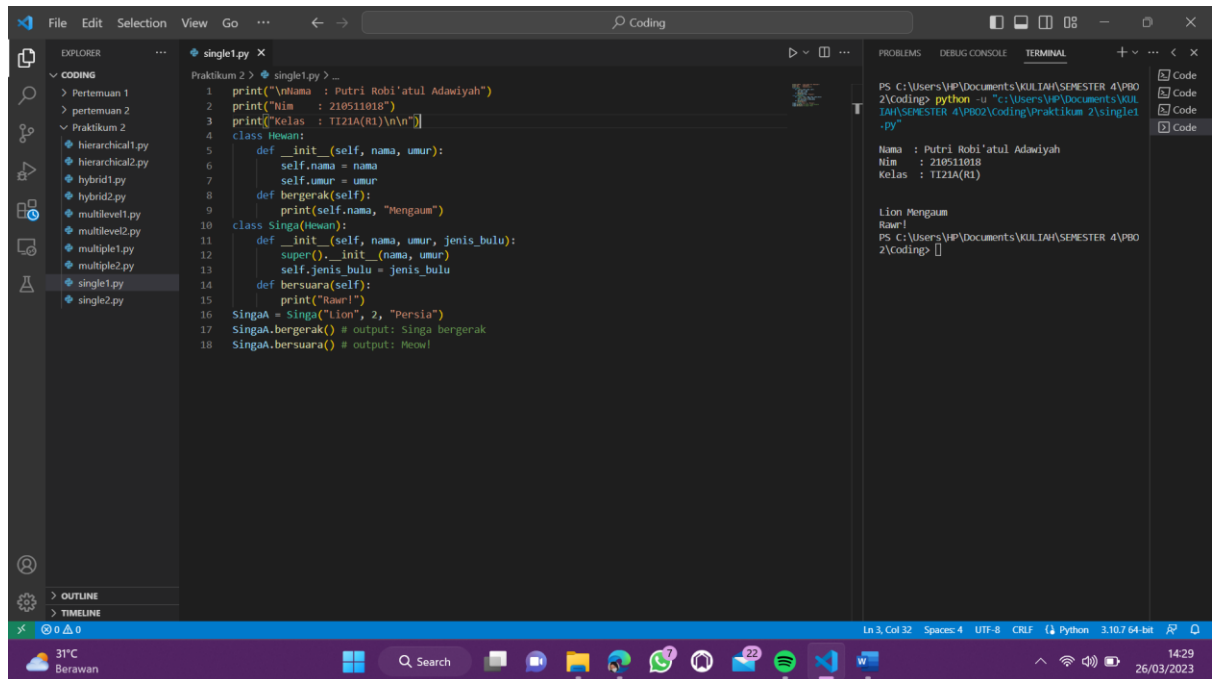
Nama : Putri Robi'atul Adawiyah

Nim : 210511018

Kelas : TI21A (R1)

Tugas : SS Praktikum Inheritance PBO2

## 1. Single



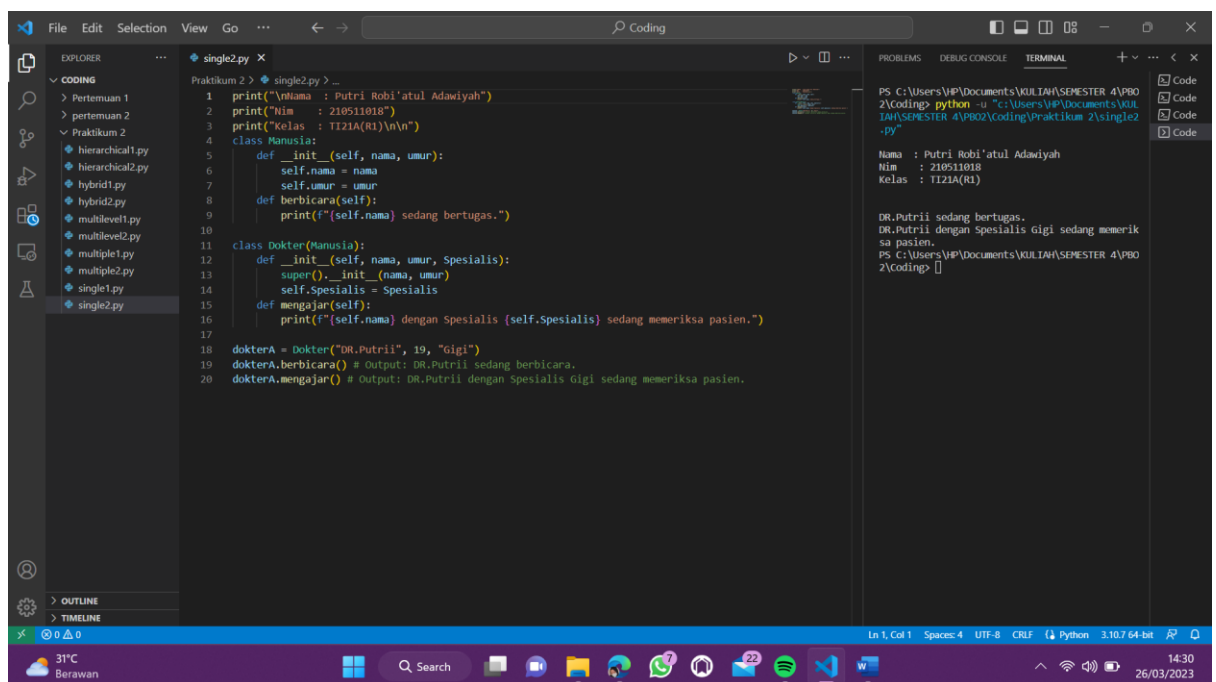
```
File Edit Selection View Go ... Coding
EXPLORER
CODING
Praktikum 2 > single1.py
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class Hewan:
5     def __init__(self, nama, umur):
6         self.nama = nama
7         self.umur = umur
8     def bergerak(self):
9         print(self.nama, "Mengaum")
10 class Singa(Hewan):
11     def __init__(self, nama, umur, jenis_bulu):
12         super().__init__(nama, umur)
13         self.jenis_bulu = jenis_bulu
14     def bersuara(self):
15         print("Rawr!")
16 SingaA = Singa("Lion", 2, "Persia")
17 SingaA.bergerak() # output: Singa bergerak
18 SingaA.bersuara() # output: Meow!
```

PROBLEMS DEBUG CONSOLE TERMINAL

```
PS C:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO 2(coding)> python -u "c:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO2(coding)\Praktikum 2(single1.py)"
Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

Lion Mengaum
Rawr!
```

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```
File Edit Selection View Go ... Coding
EXPLORER
CODING
Praktikum 2 > single2.py
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class Manusia:
5     def __init__(self, nama, umur):
6         self.nama = nama
7         self.umur = umur
8     def berbicara(self):
9         print(f"{self.nama} sedang bertugas.")
10 class Dokter(Manusia):
11     def __init__(self, nama, umur, Spesialis):
12         super().__init__(nama, umur)
13         self.Spesialis = Spesialis
14     def mengajar(self):
15         print(f"{self.nama} dengan Spesialis {self.Spesialis} sedang memeriksa pasien.")
16 dokterA = Dokter("DR.Putrii", 19, "Gigi")
17 dokterA.berbicara() # Output: DR.Putrii sedang berbicara.
18 dokterA.mengajar() # Output: DR.Putrii dengan Spesialis Gigi sedang memeriksa pasien.
```

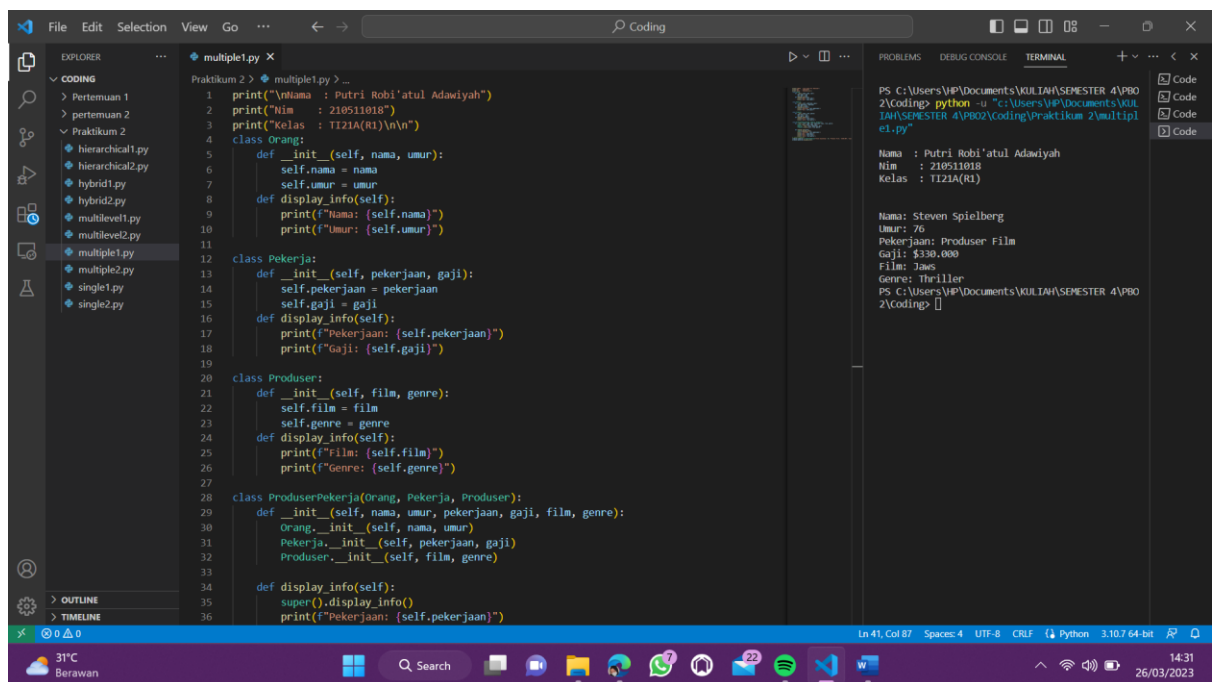
PROBLEMS DEBUG CONSOLE TERMINAL

```
PS C:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO 2(coding)> python -u "c:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO2(coding)\Praktikum 2(single2.py)"
Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

DR.Putrii sedang bertugas.
DR.Putrii dengan Spesialis Gigi sedang memeriksa pasien.
PS C:\Users\HP\Documents\KULIAH\SEMESTER 4\PBO 2(coding)>
```

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## 2. Multiple



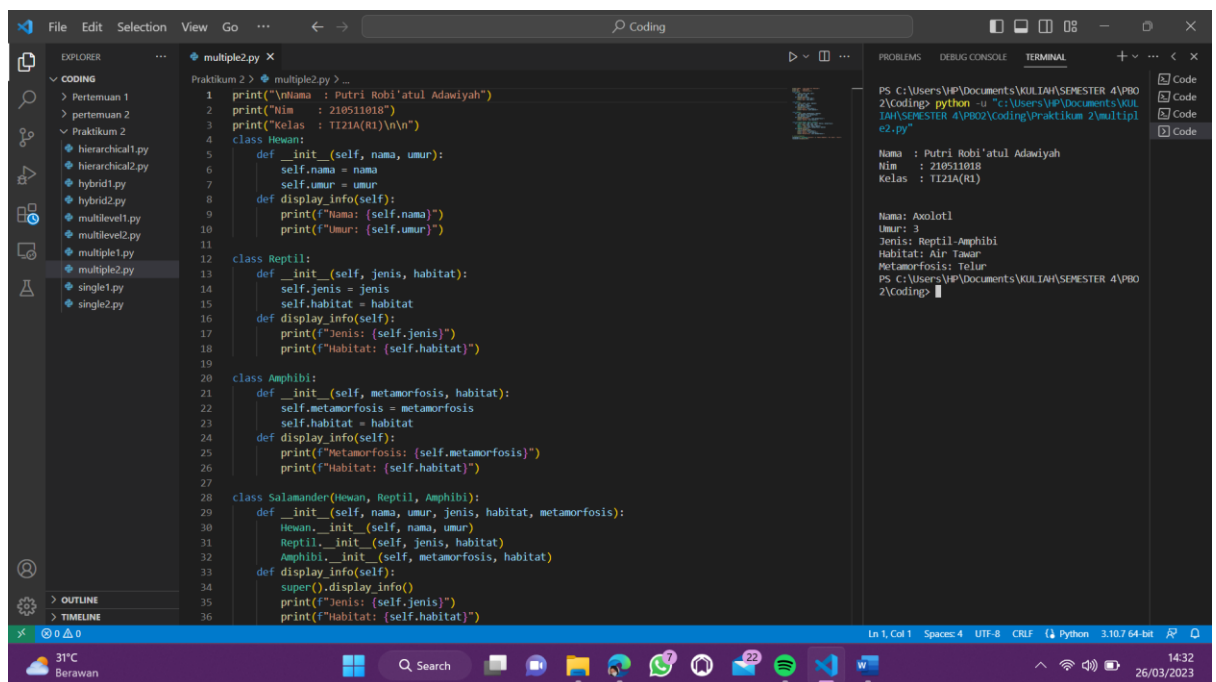
```
Praktikum 2 > multiple1.py > ...
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class Orang:
5     def __init__(self, nama, umur):
6         self.nama = nama
7         self.umur = umur
8     def display_info(self):
9         print(f"Nama: {self.nama}")
10        print(f"Umur: {self.umur}")
11
12 class Pekerja:
13     def __init__(self, pekerjaan, gaji):
14         self.pekerjaan = pekerjaan
15         self.gaji = gaji
16     def display_info(self):
17         print(f"Pekerjaan: {self.pekerjaan}")
18         print(f"Gaji: {self.gaji}")
19
20 class Produser:
21     def __init__(self, film, genre):
22         self.film = film
23         self.genre = genre
24     def display_info(self):
25         print(f"Film: {self.film}")
26         print(f"Genre: {self.genre}")
27
28 class ProduserPekerja(Orang, Pekerja, Produser):
29     def __init__(self, nama, umur, pekerjaan, gaji, film, genre):
30         Orang.__init__(self, nama, umur)
31         Pekerja.__init__(self, pekerjaan, gaji)
32         Produser.__init__(self, film, genre)
33
34 def display_info(self):
35     super().display_info()
36     print(f"Pekerjaan: {self.pekerjaan}")
```

PS C:\Users\VP\Documents\VOULIAH\SEMESTER 4\PRO  
2\coding> python -u "c:\Users\VP\Documents\VOUL  
IAH\SEMESTER 4\PRO2\coding\Praktikum 2\multipl  
e1.py"

Nama : Putri Robi'atul Adawiyah  
Nim : 210511018  
Kelas : TI21A(R1)

Nama: Steven Spielberg  
Umur: 76  
Pekerjaan: Produser Film  
Gaji: \$300.000  
Film: Jaws  
Genre: Thriller  
PS C:\Users\VP\Documents\VOULIAH\SEMESTER 4\PRO  
2\coding> |

## 3. Multilevel



```
Praktikum 2 > multiple2.py > ...
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class Hewan:
5     def __init__(self, nama, umur):
6         self.nama = nama
7         self.umur = umur
8     def display_info(self):
9         print(f"Nama: {self.nama}")
10        print(f"Umur: {self.umur}")
11
12 class Reptil:
13     def __init__(self, jenis, habitat):
14         self.jenis = jenis
15         self.habitat = habitat
16     def display_info(self):
17         print(f"Jenis: {self.jenis}")
18         print(f"Habitat: {self.habitat}")
19
20 class Amphibi:
21     def __init__(self, metamorfosis, habitat):
22         self.metamorfosis = metamorfosis
23         self.habitat = habitat
24     def display_info(self):
25         print(f"Metamorfosis: {self.metamorfosis}")
26         print(f"Habitat: {self.habitat}")
27
28 class Salamander(Hewan, Reptil, Amphibi):
29     def __init__(self, nama, umur, jenis, habitat, metamorfosis):
30         Hewan.__init__(self, nama, umur)
31         Reptil.__init__(self, jenis, habitat)
32         Amphibi.__init__(self, metamorfosis, habitat)
33     def display_info(self):
34         super().display_info()
35         print(f"Jenis: {self.jenis}")
36         print(f"Habitat: {self.habitat}")
```

PS C:\Users\VP\Documents\VOULIAH\SEMESTER 4\PRO  
2\coding> python -u "c:\Users\VP\Documents\VOUL  
IAH\SEMESTER 4\PRO2\coding\Praktikum 2\multipl  
e2.py"

Nama : Putri Robi'atul Adawiyah  
Nim : 210511018  
Kelas : TI21A(R1)

Nama: Axolotl  
Umur: 3  
Jenis: Reptil-Amphibi  
Habitat: Air Tawar  
Metamorfosis: Telur  
PS C:\Users\VP\Documents\VOULIAH\SEMESTER 4\PRO  
2\coding> |

The screenshot shows a Visual Studio Code editor with a file named `multilevel1.py` open. The code defines a `Person` class with attributes `name` and `age`, and a `get_details` method. It also defines a `Karyawan` class that inherits from `Person`, adding attributes `gender` and `salary`, and a `Designer` class that inherits from `Karyawan`, adding the attribute `fashion`. The `Designer` class also has a `get_details` method. The code is executed, and the terminal shows the output of the `get_details` method for a `Designer` object.

```
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class Person:
5     def __init__(self, name, age):
6         self.name = name
7         self.age = age
8     def get_details(self):
9         print(f"Name: {self.name}, Age: {self.age}")
10
11 class Karyawan(Person):
12     def __init__(self, name, age, gender, salary):
13         super().__init__(name, age)
14         self.gender = gender
15         self.salary = salary
16     def get_details(self):
17         super().get_details()
18         print(f"Gender: {self.gender}, Salary: {self.salary}")
19
20 class Designer(Karyawan):
21     def __init__(self, name, age, gender, salary, fashion):
22         super().__init__(name, age, gender, salary)
23         self.fashion = fashion
24     def get_details(self):
25         super().get_details()
26         print(f"Fashion: {self.fashion}")
27
28 DesignerA = Designer("Putri", 19, "Female", "14jt", "Dress")
29 DesignerA.get_details()
```

Terminal Output:

```
PS C:\Users\VP\Documents\KULIAH\SEMESTER 4\PRO
2\Coding> python -u "C:\Users\VP\Documents\KUL
IAH\SEMESTER 4\PRO2\Coding\Praktikum 2\multile
vel1.py"

Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

Name: Putri, Age: 19
Gender: Female, Salary: 14jt
Fashion: Dress
PS C:\Users\VP\Documents\KULIAH\SEMESTER 4\PRO
2\Coding> []
```

The screenshot shows a Visual Studio Code editor with a file named `multilevel2.py` open. The code defines a `Hewan` class with attributes `nama` and `jenis`, and a `kelinci` class that inherits from `Hewan`, adding the attribute `color`. The `kelinci` class also has a `fly` method. The code is executed, and the terminal shows the output of the `fly` method for a `kelinci` object.

```
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class Hewan:
5     def __init__(self, nama):
6         self.nama = nama
7     def speak(self):
8         print(f"{self.nama} speaks")
9
10 class Kelinci(Hewan):
11     def __init__(self, nama, jenis):
12         super().__init__(nama)
13         self.jenis = jenis
14     def fly(self):
15         print(f"{self.nama} adalah seekor kelinci lucu dengan jenis {self.jenis}")
16         print(f"~*~*~*~")
17
18 class Hollandop(Kelinci):
19     def __init__(self, nama, jenis, color):
20         super().__init__(nama, jenis)
21         self.color = color
22     def speak(self):
23         print(f"{self.nama} adalah kelinci berwarna {self.color} yang sangat menggemaskan")
24         print(f"~*~*~*~")
25
26 HollandopA = Hollandop("Bubu", "Holland Lop", "Abu-Abu")
27 HollandopA.speak() # Output: Bubu adalah kelinci berwarna Abu-Abu yang sangat menggemaskan
28 HollandopA.fly() # Output: Bubu adalah seekor kelinci lucu dengan jenis Holland Lop
```

Terminal Output:

```
PS C:\Users\VP\Documents\KULIAH\SEMESTER 4\PRO
2\Coding> python -u "C:\Users\VP\Documents\KUL
IAH\SEMESTER 4\PRO2\Coding\Praktikum 2\multile
vel2.py"

Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

Bubu adalah kelinci berwarna Abu-Abu yang sang
at menggemaskan
~~~~~
Bubu adalah seekor kelinci lucu dengan jenis H
olland Lop
~~~~~
PS C:\Users\VP\Documents\KULIAH\SEMESTER 4\PRO
2\Coding> []
```

#### 4. Hybrid

The screenshot shows the VS Code editor with the file `hybrid1.py` open. The code defines a `GameObject` class with `__init__` and `data` methods. It also includes single inheritance for `Drawable` and `Moveable` classes, and multiple inheritance for the `Player` class. The `Player` class inherits from `GameObject`, `Drawable`, and `Moveable`. The `data` method in `Player` prints the object's data. The terminal shows the output of running the script, displaying the name, ID, and class of the `GameObject` and `Player` objects.

```
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class GameObject:
5     def __init__(self, x, y):
6         self.x = x
7         self.y = y
8     def data(self):
9         print(f"({self.x} {self.y})")
10
11 # Single Inheritance
12 class Drawable:
13     def draw(self):
14         print("Drawing object at: ", self.x, self.y)
15
16 # Single Inheritance
17 class Moveable:
18     def move(self, dx, dy):
19         self.x += dx
20         self.y += dy
21
22 # Multiple Inheritance
23 class Player(GameObject, Drawable, Moveable):
24     def __init__(self, x, y):
25         super().__init__(x, y)
26     def update(self):
27         self.move(1, 1)
28         self.draw()
29     def data(self):
30         print(f"({self.x} {self.y})")
31
32 GameobjectA = Player(1.000, 500)
33 GameobjectA.data()
```

Terminal Output:

```
PS C:\Users\HP\Documents\VOULIAH\SEMESTER 4\PROG2\coding> python -u "C:\Users\HP\Documents\VOULIAH\SEMESTER 4\PROG2\coding\Praktikum 2\hybrid1.py"
Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

1.0 500
PS C:\Users\HP\Documents\VOULIAH\SEMESTER 4\PROG2\coding>
```

The screenshot shows the VS Code editor with the file `hybrid2.py` open. The code defines a `GameObject` class with `__init__` and `data` methods. It also includes single inheritance for `Drawable` and `Moveable` classes, and multiple inheritance for the `Player` class. The `Player` class inherits from `GameObject`, `Drawable`, and `Moveable`. The `data` method in `Player` prints the object's data. The terminal shows the output of running the script, displaying the name, ID, and class of the `GameObject` and `Player` objects.

```
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class GameObject:
5     def __init__(self, x, y):
6         self.x = x
7         self.y = y
8     def data(self):
9         print(f"({self.x} {self.y})")
10
11 # Single Inheritance
12 class Drawable:
13     def draw(self):
14         print("Drawing object at: ", self.x, self.y)
15
16 # Single Inheritance
17 class Moveable:
18     def move(self, dx, dy):
19         self.x += dx
20         self.y += dy
21
22 # Multiple Inheritance
23 class Player(GameObject, Drawable, Moveable):
24     def __init__(self, x, y):
25         super().__init__(x, y)
26     def update(self):
27         self.move(1, 1)
28         self.draw()
29     def data(self):
30         print(f"({self.x} {self.y})")
31
32 GameobjectA = Player("satu", "dua" )
33 GameobjectA.data()
```

Terminal Output:

```
PS C:\Users\HP\Documents\VOULIAH\SEMESTER 4\PROG2\coding> python -u "C:\Users\HP\Documents\VOULIAH\SEMESTER 4\PROG2\coding\Praktikum 2\hybrid2.py"
Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

satu dua
PS C:\Users\HP\Documents\VOULIAH\SEMESTER 4\PROG2\coding>
```

## 5. Hierarchical

```
File Edit Selection View Go ... Coding
EXPLORER
CODING
Praktikum 2 > hierarchial1.py > ...
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class Alaskaki:
5     def __init__(self, nama):
6         self.nama = nama
7     def get_nama(self):
8         return self.nama
9     def data(self):
10        print(f"self.nama data")
11
12 class Sepatu(Alaskaki):
13     def __init__(self, nama, merek):
14         super().__init__(nama)
15         self.merek = merek
16     def get_merek(self):
17         return self.merek
18
19 class Sandal(Alaskaki):
20     def __init__(self, nama, merek):
21         super().__init__(nama)
22         self.merek = merek
23     def get_merek(self):
24         return self.merek
25
26 # turunan Hierarchical Inheritance
27 class Kets(Sepatu):
28     def __init__(self, nama, merek, ukuran):
29         super().__init__(nama, merek)
30         self.ukuran = ukuran
31     def get_ukuran(self):
32         return self.ukuran
33     def data(self):
34         print(f"sebuah sepatu {self.nama} dengan merek {self.merek} dg ukuran {self.ukuran}")
35         print("\n"*54)
36
TERMINAL
PS C:\Users\VIP\Documents\VOULIAH\SEMESTER 4\PROG2\coding> python -u "C:\Users\VIP\Documents\VOULIAH\SEMESTER 4\PROG2\coding\Praktikum 2\hierarchial1.py"
Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

sebuah sepatu Nike dengan merek Air Jordan dg ukuran 37 terlihat sangat cantik
=====
sandal Eiger dengan merek Ugiaba dg harga Rp. 142.000 sangat nyaman digunakan
PS C:\Users\VIP\Documents\VOULIAH\SEMESTER 4\PROG2\coding>
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Python 3.10.7 64-bit 14:34 26/03/2023
```

```
File Edit Selection View Go ... Coding
EXPLORER
CODING
Praktikum 2 > hierarchial2.py > ...
1 print("\nNama : Putri Robi'atul Adawiyah")
2 print("Nim : 210511018")
3 print("Kelas : TI21A(R1)\n\n")
4 class work:
5     def __init__(self, name, age, salary):
6         self.name = name
7         self.age = age
8         self.salary = salary
9     def get_name(self):
10        return self.name
11    def get_age(self):
12        return self.age
13    def get_salary(self):
14        return self.salary
15    def data(self):
16        print(f"self.name data")
17
18 class Manager(work):
19     def __init__(self, name, age, salary, department):
20         super().__init__(name, age, salary)
21         self.department = department
22     def get_department(self):
23         return self.department
24
25 class Aktor(work):
26     def __init__(self, name, age, salary, film):
27         super().__init__(name, age, salary)
28         self.film = film
29     def get_film(self):
30         return self.film
31
32 # Hierarchical Inheritance
33 class SeniorAktor(Aktor):
34     def __init__(self, name, age, salary, film, genre):
35         super().__init__(name, age, salary, film)
36         self.genre = genre
37
TERMINAL
PS C:\Users\VIP\Documents\VOULIAH\SEMESTER 4\PROG2\coding> python -u "C:\Users\VIP\Documents\VOULIAH\SEMESTER 4\PROG2\coding\Praktikum 2\hierarchial2.py"
Nama : Putri Robi'atul Adawiyah
Nim : 210511018
Kelas : TI21A(R1)

aktor tapan Gong Yoo Berumur 43 th berpenghas ilan Rp 17,2M memainkan drama berjudul Goblin yg bergenre Fantasi & Romance
=====
PS C:\Users\VIP\Documents\VOULIAH\SEMESTER 4\PROG2\coding>
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Python 3.10.7 64-bit 14:35 26/03/2023
```