UNIVERSITAS MUHAMMADIYAH CIREBON

LAPORAN PRAKTIKUM

PEMROGRAMAN BERORIENTASI OBJEK LANJUT

2023

Prepared By:

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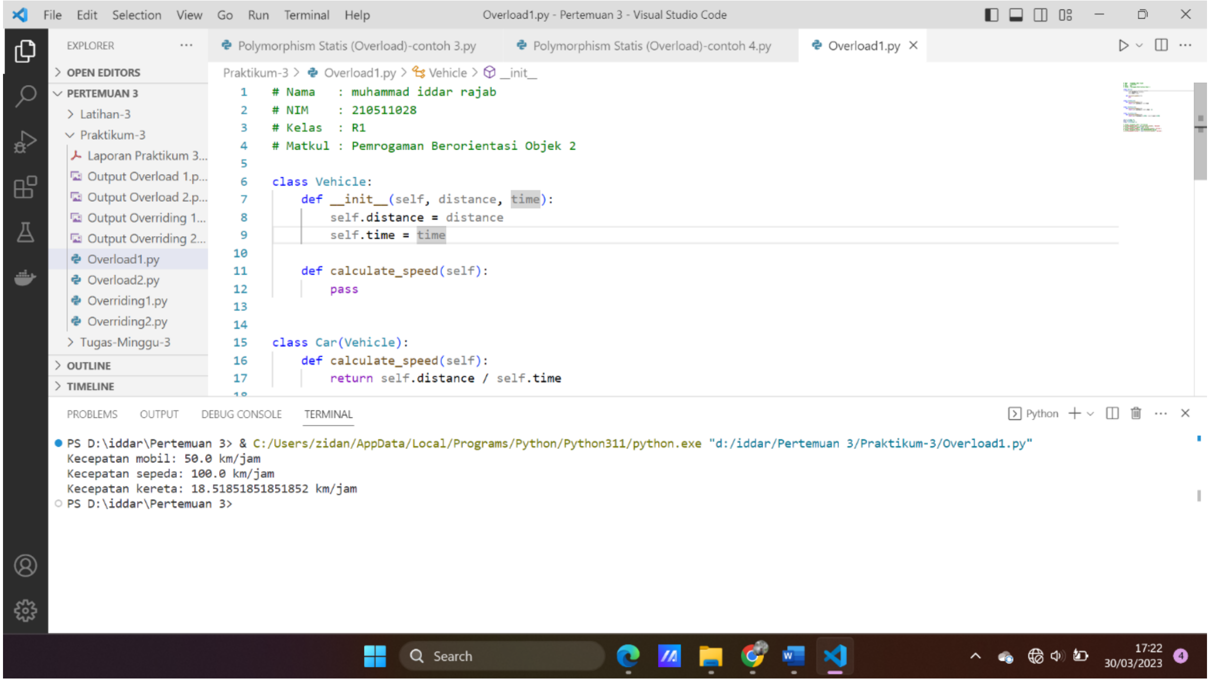
Kelas : R1

Nim : 210511028

Overload 1

```
# Nama   : muhammad iddar rajab
# NIM    : 210511028
# Kelas  : R1
# Matkul : Pemrogaman Berorientasi Objek 2

class Vehicle:
    def __init__(self, distance, time):
        self.distance = distance
        self.time = time

    def calculate_speed(self):
        pass

class Car(Vehicle):
    def calculate_speed(self):
        return self.distance / self.time

class Bike(Vehicle):
    def calculate_speed(self):
        return self.distance / (self.time / 2)

class Train(Vehicle):
    def calculate_speed(self):
        return (self.distance * 1000) / (self.time * 3600)

car = Car(100, 2)
bike = Bike(50, 1)
train = Train(200, 3)

# Output: Kecepatan mobil: 50.0 km/jam
print("Kecepatan mobil:", car.calculate_speed(), "km/jam")
# Output: Kecepatan sepeda: 100.0 km/jam
print("Kecepatan sepeda:", bike.calculate_speed(), "km/jam")
# Output: Kecepatan kereta: 18.51851851851852 km/jam
print("Kecepatan kereta:", train.calculate_speed(), "km/jam")

```



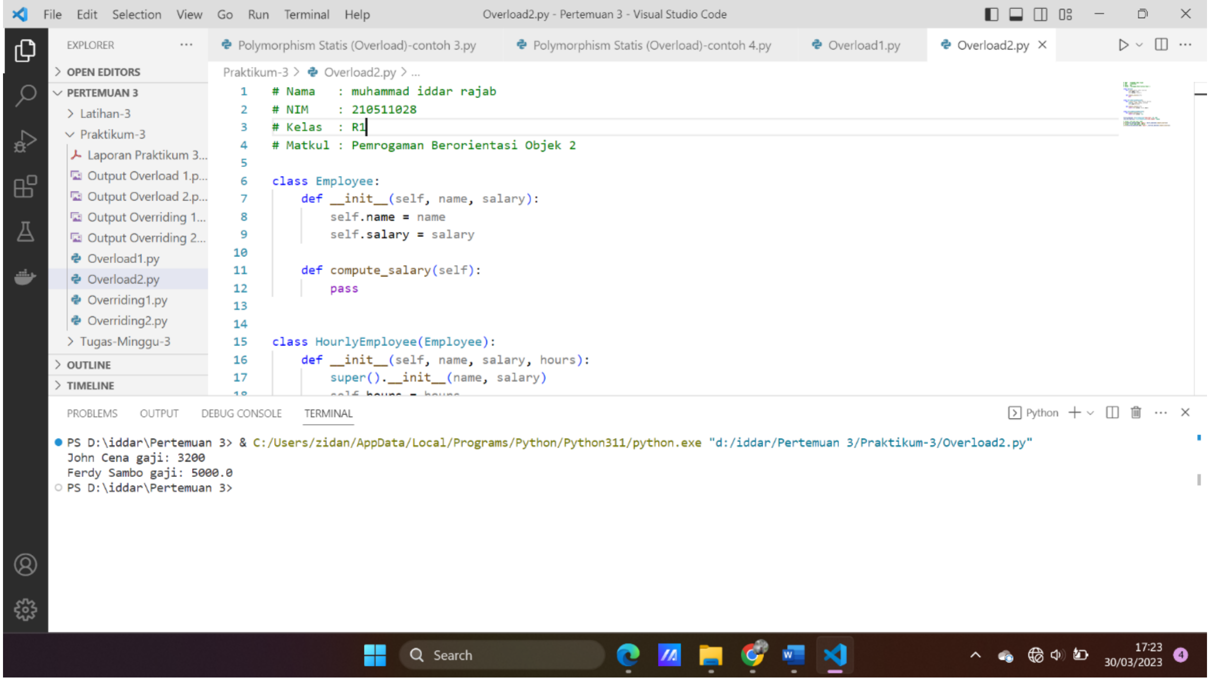
```python
# Nama   : muhammad iddar rajab
# NIM    : 210511028
# Kelas  : R1
# Matkul : Pemrogaman Berorientasi Objek 2

class Vehicle:
    def __init__(self, distance, time):
        self.distance = distance
        self.time = time

    def calculate_speed(self):
        pass


class Car(Vehicle):
    def calculate_speed(self):
        return self.distance / self.time
```

```
PS D:\iddar\Pertemuan 3> & C:/Users/zidan/AppData/Local/Programs/Python/Python311/python.exe "d:/iddar/Pertemuan 3/Praktikum-3/Overload1.py"
Kecepatan mobil: 50.0 km/jam
Kecepatan sepeda: 100.0 km/jam
Kecepatan kereta: 18.51851851851852 km/jam
PS D:\iddar\Pertemuan 3>
```

2. overload 2

```python
# Nama   : muhammad iddar rajab
# NIM    : 210511028
# Kelas  : R1
# Matkul : Pemrogaman Berorientasi Objek 2

class Employee:
    def __init__(self, name, salary):
        self.name = name
        self.salary = salary

    def compute_salary(self):
        pass


class HourlyEmployee(Employee):
    def __init__(self, name, salary, hours):
        super().__init__(name, salary)
        self.hours = hours

    def compute_salary(self):
        return self.salary * self.hours


class SalariedEmployee(Employee):
    def compute_salary(self):
        return self.salary / 12
```

```python
hourly_employee = HourlyEmployee("John Cena", 20, 160)
salaried_employee = SalariedEmployee("Ferdy Sambo", 60000)

# Output: John Cena gaji: 3200
print(hourly_employee.name, "gaji:", hourly_employee.compute_salary())
# Output: Ferdy Sambo gaji: 5000.0
print(salaried_employee.name, "gaji:", salaried_employee.compute_salary())
```

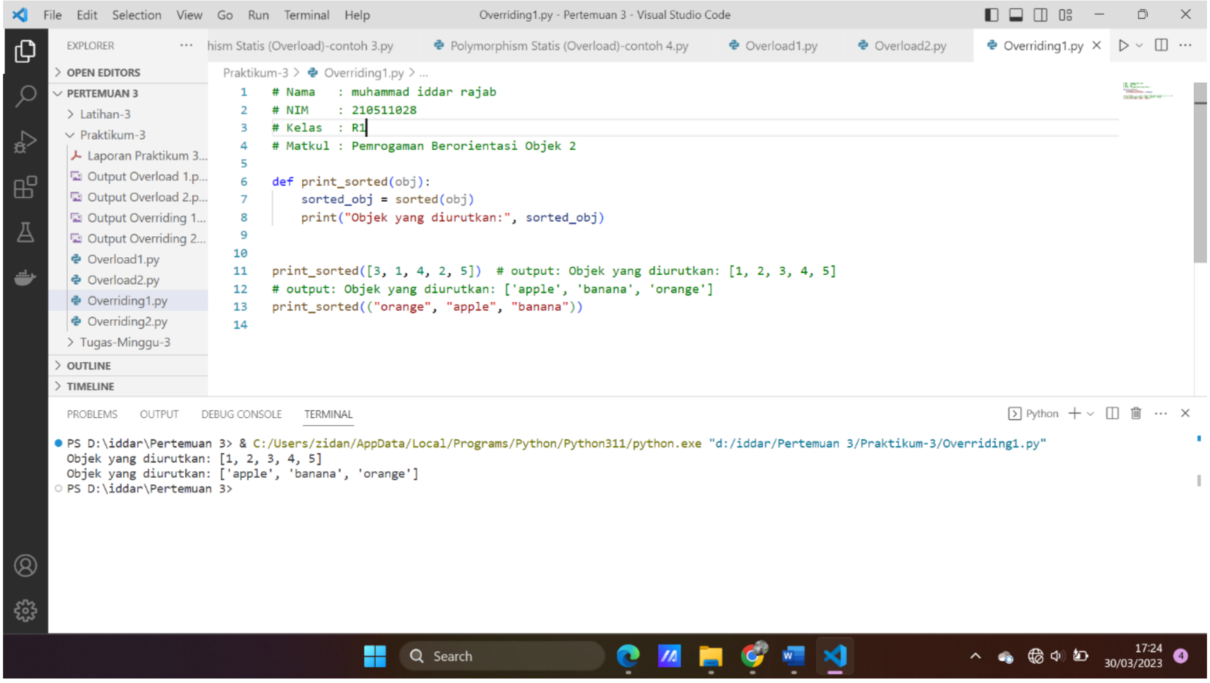


```python
# Nama   : muhammad iddar rajab
# NIM    : 210511028
# Kelas  : R1
# Matkul : Pemrogaman Berorientasi Objek 2

class Employee:
    def __init__(self, name, salary):
        self.name = name
        self.salary = salary

    def compute_salary(self):
        pass


class HourlyEmployee(Employee):
    def __init__(self, name, salary, hours):
        super().__init__(name, salary)
        self.hours = hours
```

```
PS D:\iddar\Pertemuan 3> & C:/Users/zidan/AppData/Local/Programs/Python/Python311/python.exe "d:/iddar/Pertemuan 3/Praktikum-3/Overload2.py"
John Cena gaji: 3200
Ferdy Sambo gaji: 5000.0
PS D:\iddar\Pertemuan 3>
```

3. overriding 1

```python
# Nama   : muhammad iddar rajab
# NIM    : 210511028
# Kelas  : R1
# Matkul : Pemrogaman Berorientasi Objek 2

def print_sorted(obj):
    sorted_obj = sorted(obj)
    print("Objek yang diurutkan:", sorted_obj)


print_sorted([3, 1, 4, 2, 5])  # output: Objek yang diurutkan: [1, 2, 3, 4, 5]
# output: Objek yang diurutkan: ['apple', 'banana', 'orange']
print_sorted(("orange", "apple", "banana"))
```



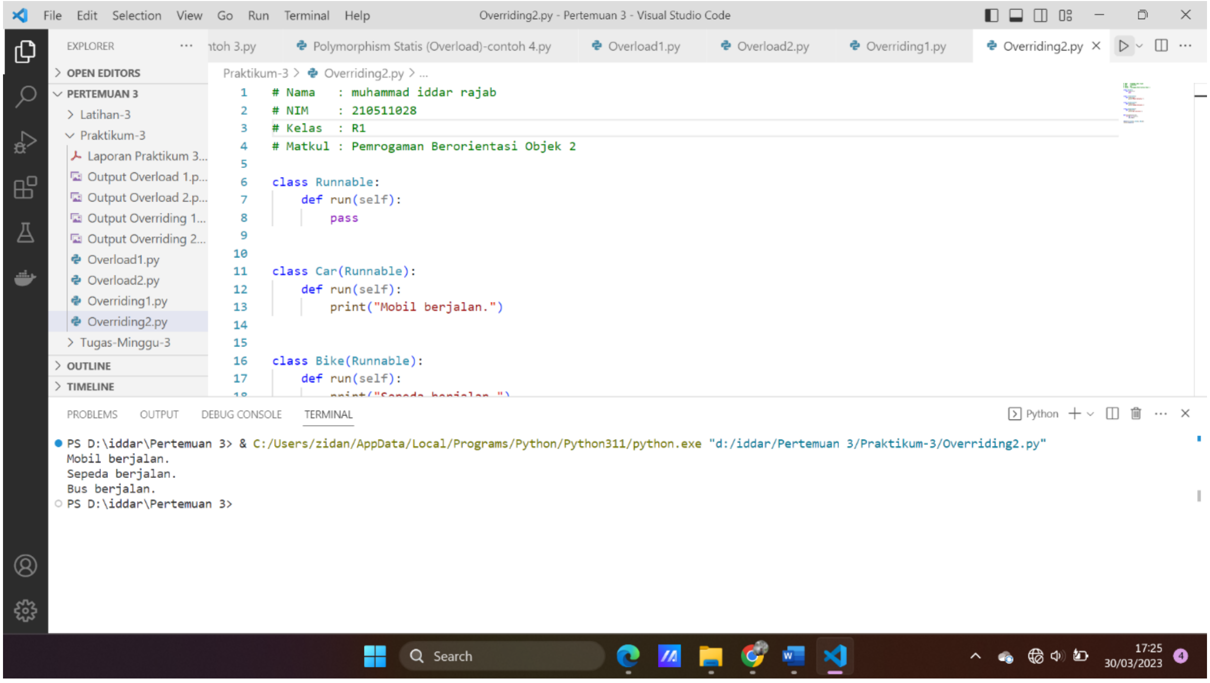
```
# Nama   : muhammad iddar rajab
# NIM    : 210511028
# Kelas  : R1
# Matkul : Pemrogaman Berorientasi Objek 2

def print_sorted(obj):
    sorted_obj = sorted(obj)
    print("Objek yang diurutkan:", sorted_obj)


print_sorted([3, 1, 4, 2, 5])  # output: Objek yang diurutkan: [1, 2, 3, 4, 5]
# output: Objek yang diurutkan: ['apple', 'banana', 'orange']
print_sorted(("orange", "apple", "banana"))
```

```
PS D:\iddar\Pertemuan 3> & C:/Users/zidan/AppData/Local/Programs/Python/Python311/python.exe "d:/iddar/Pertemuan 3/Praktikum-3/Overriding1.py"
Objek yang diurutkan: [1, 2, 3, 4, 5]
Objek yang diurutkan: ['apple', 'banana', 'orange']
PS D:\iddar\Pertemuan 3>
```

4. overriding2

```
# Nama   : muhammad iddar rajab
# NIM    : 210511028
# Kelas  : R1
# Matkul : Pemrogaman Berorientasi Objek 2

class Runnable:
    def run(self):
        pass


class Car(Runnable):
    def run(self):
        print("Mobil berjalan.")


class Bike(Runnable):
    def run(self):
        print("Sepeda berjalan.")


class Bus(Runnable):
    def run(self):
        print("Bus berjalan.")
```

```python
def run_all(objects):
    for obj in objects:
        obj.run()


objects = [Car(), Bike(), Bus()]
run_all(objects)
```



```python
# Nama   : muhammad iddar rajab
# NIM    : 210511028
# Kelas  : R1
# Matkul : Pemrogaman Berorientasi Objek 2

class Runnable:
    def run(self):
        pass


class Car(Runnable):
    def run(self):
        print("Mobil berjalan.")


class Bike(Runnable):
    def run(self):
        print("Sepeda berjalan.")
```

```
PS D:\iddar\Pertemuan 3> & C:/Users/zidan/AppData/Local/Programs/Python/Python311/python.exe "d:/iddar/Pertemuan 3/Praktikum-3/Overriding2.py"
Mobil berjalan.
Sepeda berjalan.
Bus berjalan.
PS D:\iddar\Pertemuan 3>
```