

LAPORAN PRAKTIKUM

PEMROGRAMAN BERORIENTASI OBJEK LANJUT

2023



Prepared By:

PUTRI

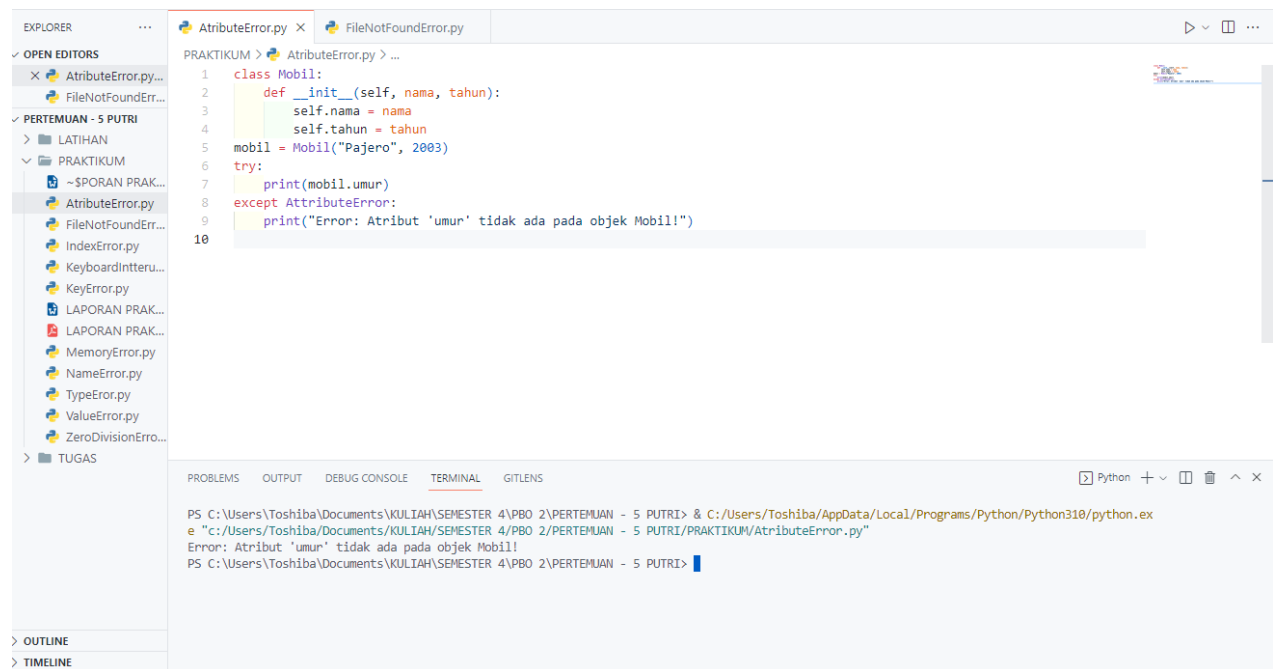
NIM. 210511068

Berikan masing-masing 1 contoh Exception Handling dengan contoh yang berbeda dari contoh yang sudah diberikan.

Attribute Error :

```
class Mobil:
    def __init__(self, nama, tahun):
        self.nama = nama
        self.tahun = tahun
mobil = Mobil("Pajero", 2003)
try:
    print(mobil.umur)
except AttributeError:
    print("Error: Atribut 'umur' tidak ada pada objek Mobil!")
```

Output

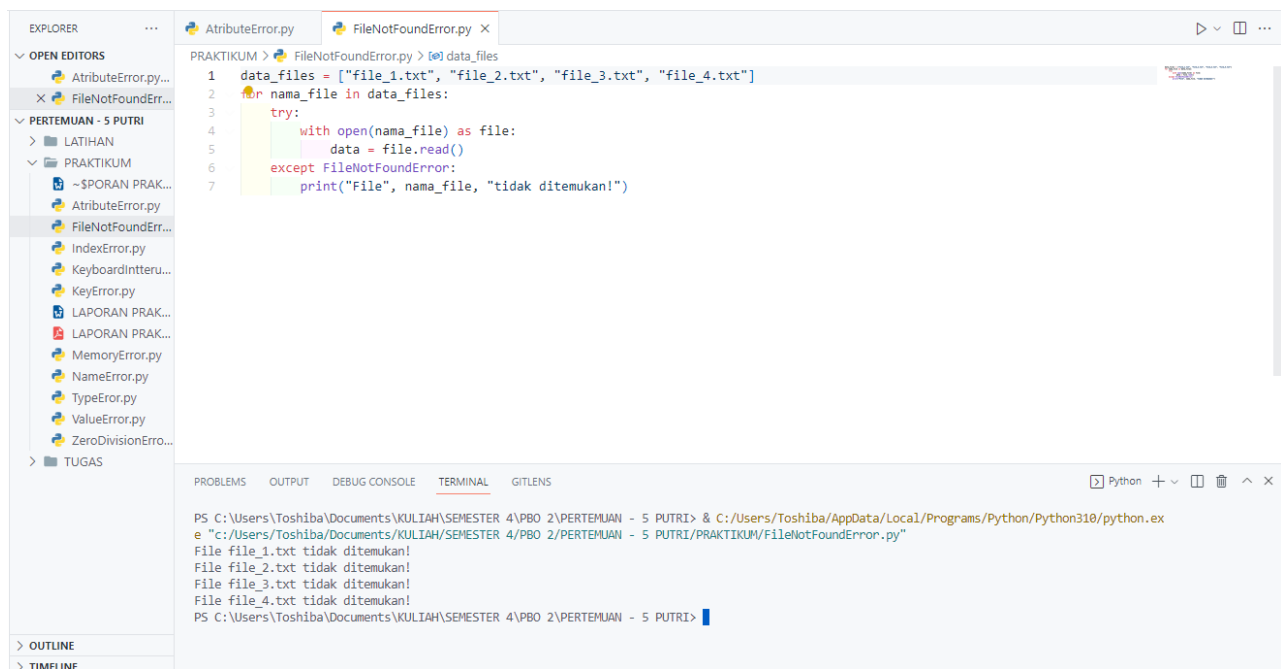


```
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PBO 2\PERTEMUAN - 5 PUTRI> & C:/Users/Toshiba/AppData/Local/Programs/Python/Python310/python.exe  
e "c:/Users/Toshiba/Documents/KULIAH/SEMESTER 4/PBO 2/PERTEMUAN - 5 PUTRI/PRAKTIKUM/AttributeError.py"  
Error: Atribut 'umur' tidak ada pada objek Mobil!  
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PBO 2\PERTEMUAN - 5 PUTRI>
```

File Not Found Error :

```
data_files = ["file_1.txt", "file_2.txt", "file_3.txt", "file_4.txt"]
for nama_file in data_files:
    try:
        with open(nama_file) as file:
            data = file.read()
    except FileNotFoundError:
        print("File", nama_file, "tidak ditemukan!")
```

Output



The screenshot shows a Python IDE with a file explorer on the left, a code editor in the center, and a terminal at the bottom. The file explorer shows a project named 'PRAKTIKUM' with a subfolder 'LATIHAN' containing a file 'FileNotFoundErr...'. The code editor shows the following Python code:

```
1 data_files = ["file_1.txt", "file_2.txt", "file_3.txt", "file_4.txt"]
2 for nama_file in data_files:
3     try:
4         with open(nama_file) as file:
5             data = file.read()
6     except FileNotFoundError:
7         print("File", nama_file, "tidak ditemukan!")
```

The terminal output shows the execution of the code, resulting in four lines of output, each indicating that a file was not found:

```
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PBO 2\PERTEMUAN - 5 PUTRI> & C:/Users/Toshiba/AppData/Local/Programs/Python/Python310/python.exe
e "c:/Users/Toshiba/Documents/KULIAH/SEMESTER 4/PBO 2/PERTEMUAN - 5 PUTRI/PRAKTIKUM/FileNotFoundError.py"
File file_1.txt tidak ditemukan!
File file_2.txt tidak ditemukan!
File file_3.txt tidak ditemukan!
File file_4.txt tidak ditemukan!
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PBO 2\PERTEMUAN - 5 PUTRI>
```

Index Error :

```
list_buah = ["jeruk", "anggur", "markisa"]
try:
    buah_keempat = list_buah[3]
except IndexError:
    print("Index yang diminta melebihi jumlah elemen dalam list!")
```

Output



The screenshot shows a Python IDE interface. The Explorer panel on the left lists several files, including 'IndexError.py'. The main editor window displays the following Python code:

```
1 list_buah = ["jeruk", "anggur", "markisa"]
2 try:
3     buah_keempat = list_buah[3]
4 except IndexError:
5     print("Index yang diminta melebihi jumlah elemen dalam list!")
```

The bottom panel shows the terminal output, which includes the command to run the script and the resulting message:

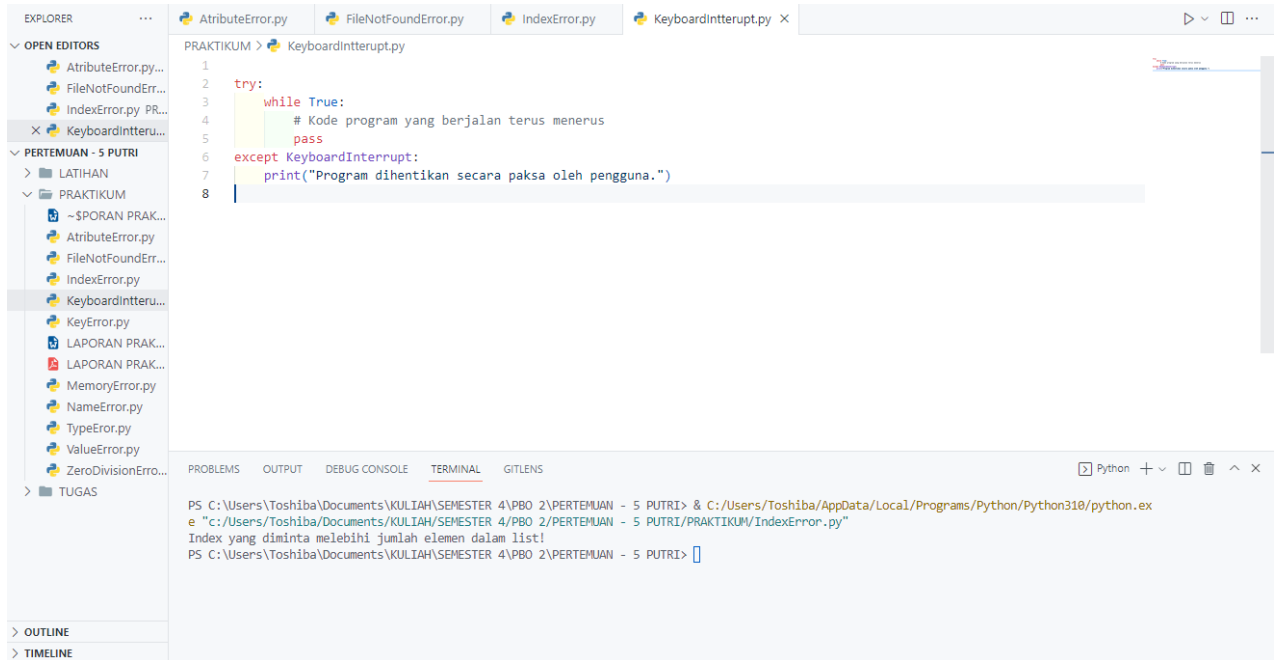
```
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PBO 2\PERTEMUAN - 5 PUTRI> & C:/Users/Toshiba/AppData/Local/Programs/Python/Python310/python.exe "c:/Users/Toshiba/Documents/KULIAH/SEMESTER 4/PBO 2/PERTEMUAN - 5 PUTRI/PRAKTIKUM/IndexError.py"
Index yang diminta melebihi jumlah elemen dalam list!
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PBO 2\PERTEMUAN - 5 PUTRI>
```

The status bar at the bottom indicates the current line and column (Ln 1, Col 20), the number of spaces (4), the encoding (UTF-8), the line ending (CRLF), the Python version (3.10.8 64-bit), and the active extensions (Go Live, Prettier).

Keyboard Interrupt :

```
try:
    while True:
        # Kode program yang berjalan terus menerus
        pass
except KeyboardInterrupt:
    print("Program dihentikan secara paksa oleh pengguna.")
```

Output

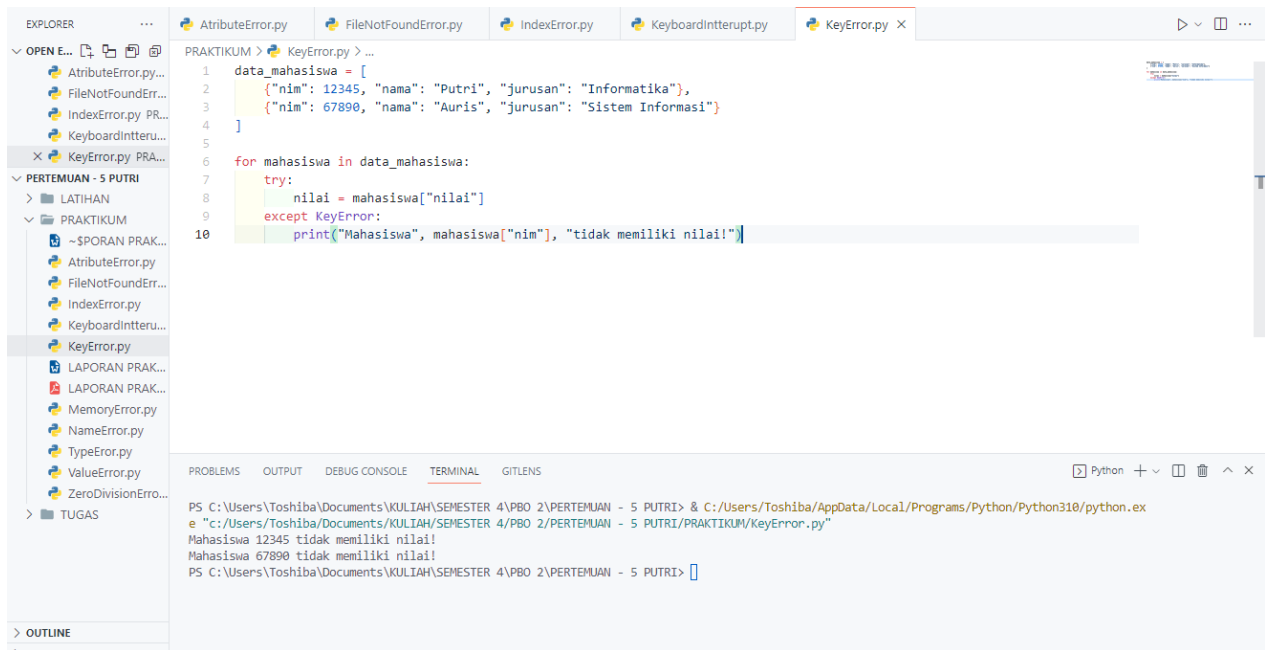


Key Error:

```
data_mahasiswa = [
    {"nim": 12345, "nama": "Putri", "jurusan": "Informatika"},
    {"nim": 67890, "nama": "Auris", "jurusan": "Sistem Informasi"}
]

for mahasiswa in data_mahasiswa:
    try:
        nilai = mahasiswa["nilai"]
    except KeyError:
        print("Mahasiswa", mahasiswa["nim"], "tidak memiliki nilai!")
```

Output



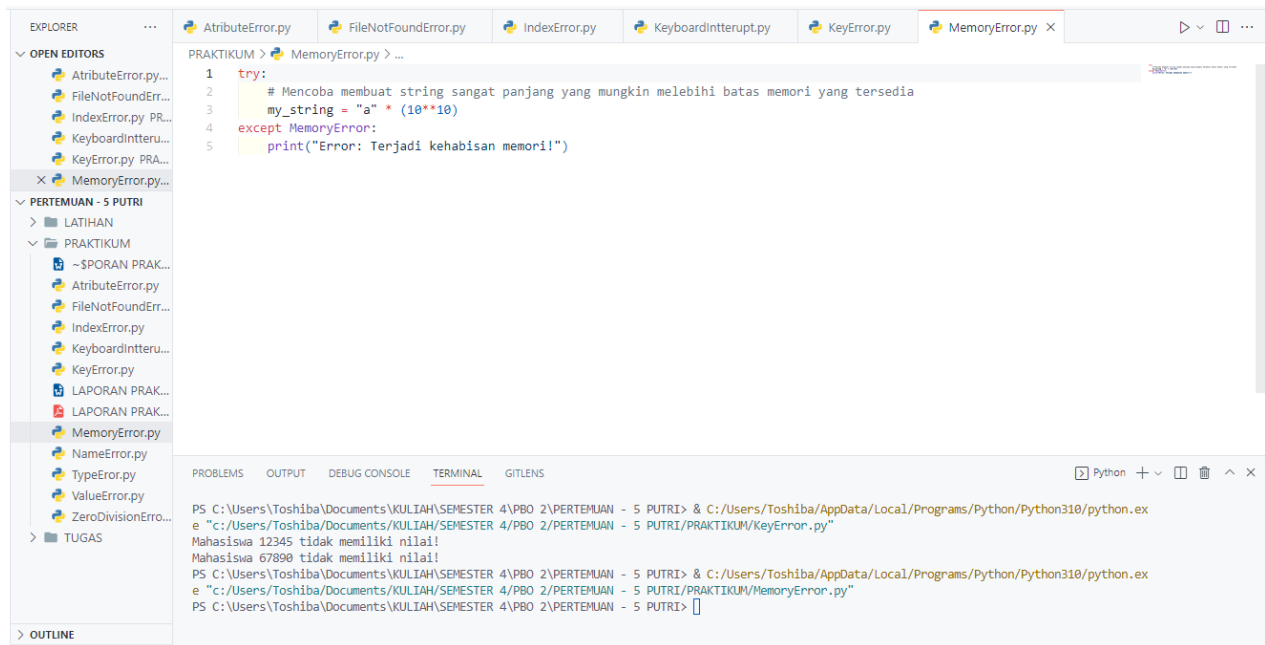
The screenshot shows a Python IDE with a file explorer on the left, a code editor in the center, and a terminal at the bottom. The file explorer shows a project named 'PRAKTIKUM' with a subfolder 'LATIHAN' containing several Python files, including 'KeyError.py'. The code editor displays the same code as the 'Key Error' section. The terminal shows the output of the program, which prints the names of the students and their NIMs, indicating that they do not have a 'nilai' (score) attribute.

```
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PBO 2\PERTEMUAN - 5 PUTRI> & C:/Users/Toshiba/AppData/Local/Programs/Python/Python310/python.exe  
e "c:/Users/Toshiba/Documents/KULIAH/SEMESTER 4/PBO 2/PERTEMUAN - 5 PUTRI/PRAKTIKUM/KeyError.py"  
Mahasiswa 12345 tidak memiliki nilai!  
Mahasiswa 67890 tidak memiliki nilai!  
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PBO 2\PERTEMUAN - 5 PUTRI>
```

Memory Error :

```
try:
    # Mencoba membuat string sangat panjang yang mungkin melebihi batas memori
    yang tersedia
    my_string = "a" * (10**10)
except MemoryError:
    print("Error: Terjadi kehabisan memori!")
```

Output



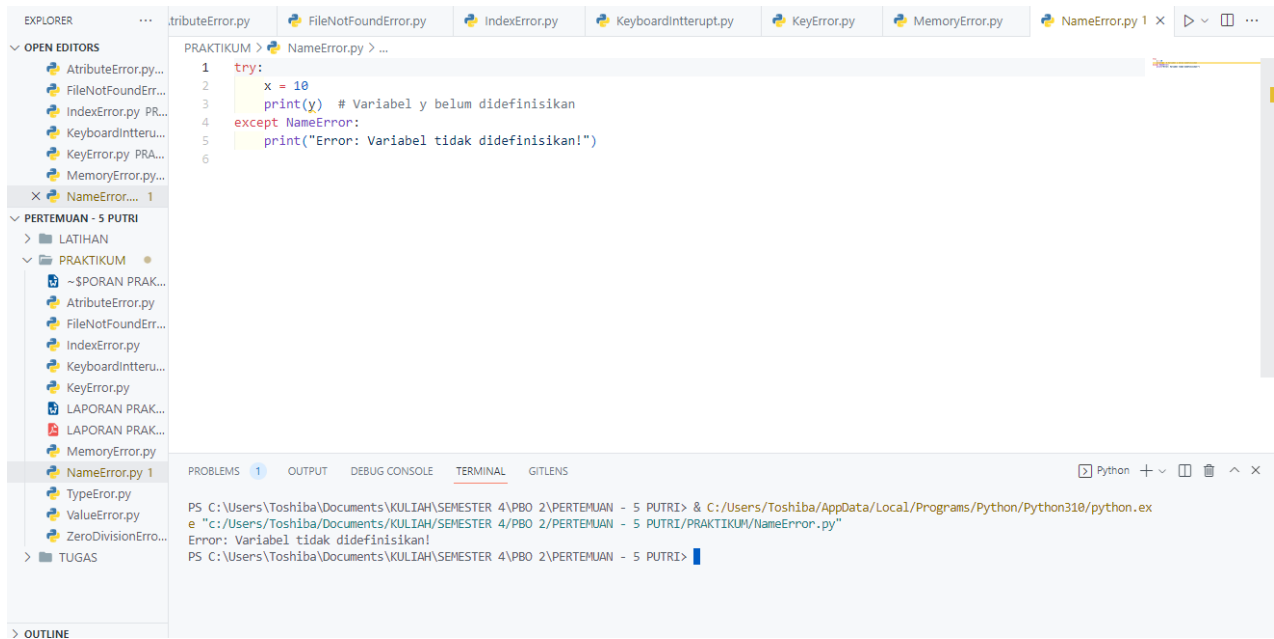
The screenshot displays a Python IDE with a file explorer on the left showing a project named 'PERTEMUAN - 5 PUTRI'. The main editor window shows the code for 'MemoryError.py'. The terminal at the bottom shows the command execution and the resulting error message.

```
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PB0 2\PERTEMUAN - 5 PUTRI> & C:/Users/Toshiba/AppData/Local/Programs/Python/Python310/python.exe "c:/Users/Toshiba/Documents/KULIAH/SEMESTER 4/PB0 2/PERTEMUAN - 5 PUTRI/PRAKTIKUM/KeyError.py"
Mahasiswa 12345 tidak memiliki nilai!
Mahasiswa 67890 tidak memiliki nilai!
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PB0 2\PERTEMUAN - 5 PUTRI> & C:/Users/Toshiba/AppData/Local/Programs/Python/Python310/python.exe "c:/Users/Toshiba/Documents/KULIAH/SEMESTER 4/PB0 2/PERTEMUAN - 5 PUTRI/PRAKTIKUM/MemoryError.py"
PS C:\Users\Toshiba\Documents\KULIAH\SEMESTER 4\PB0 2\PERTEMUAN - 5 PUTRI> []
```

Name Error :

```
try:
    x = 10
    print(y) # Variabel y belum didefinisikan
except NameError:
    print("Error: Variabel tidak didefinisikan!")
```

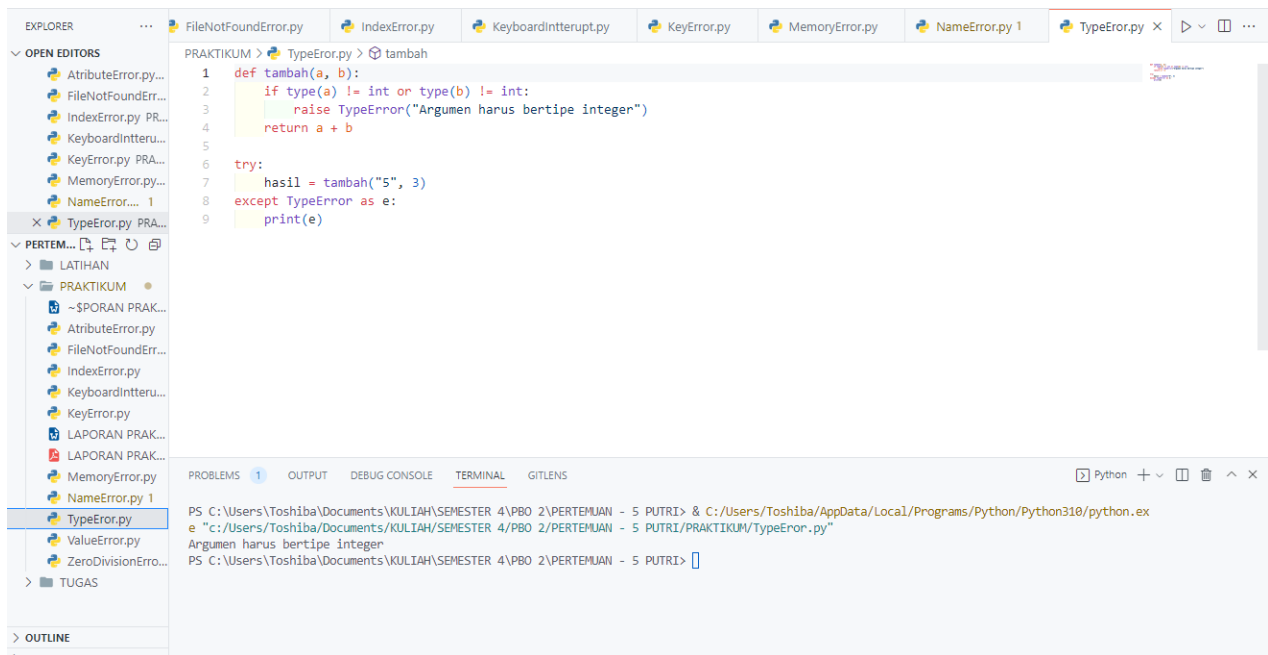
Output



Type Error :

```
def tambah(a, b):  
    if type(a) != int or type(b) != int:  
        raise TypeError("Argumen harus bertipe integer")  
    return a + b  
  
try:  
    hasil = tambah("5", 3)  
except TypeError as e:  
    print(e)
```

Output

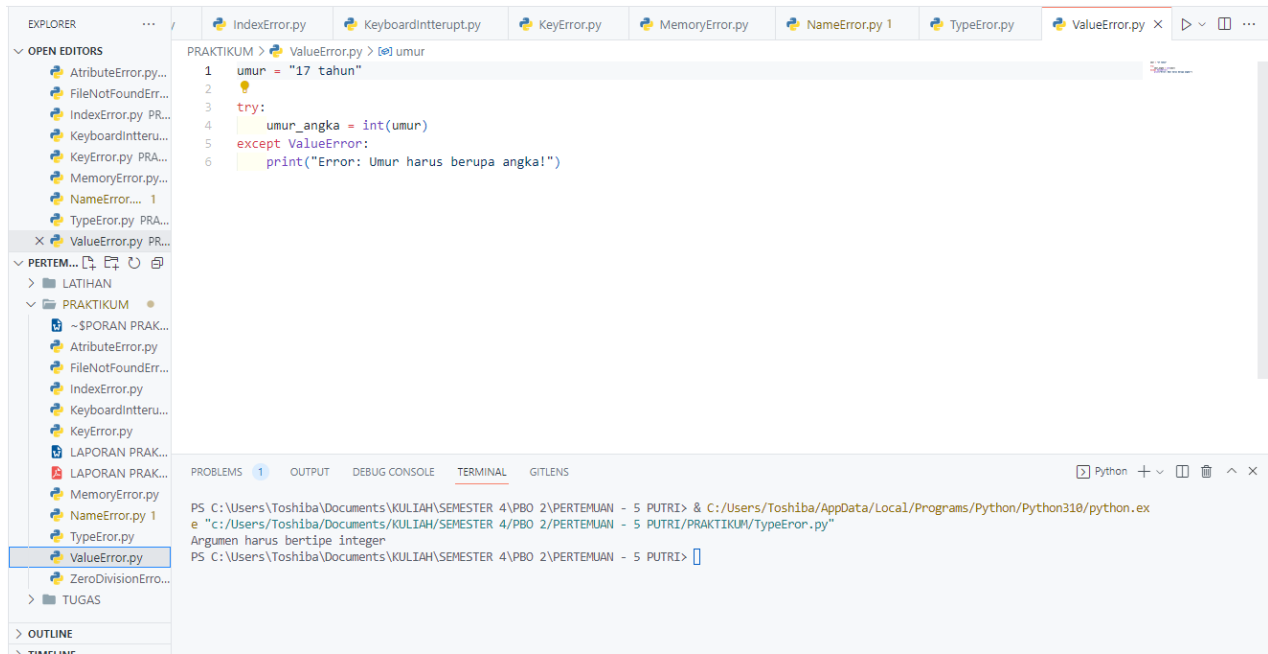


Value Error :

```
umur = "17 tahun"

try:
    umur_angka = int(umur)
except ValueError:
    print("Error: Umur harus berupa angka!")
```

Output



Zero Division Error :

```
data = [1, 2, 0, 4, 5]
for nilai in data:
    try:
        hasil = 10 / nilai
    except ZeroDivisionError:
        print("Terjadi kesalahan pembagian dengan nol!")
```

Output

