

LAPORAN PRAKTIKUM

PEMROGRAMAN BERORIENTASI OBJEK LANJUT

2023



Prepared By:

NAMA	: AYU NURUL KHAIRUNNISA
NIM	: 221511020
KELAS	: TI21K (K2 KONVERSI)

Berikan masing-masing 1 contoh untuk Exception Handling yang belum ada contohnya.

JAWABAN:

1. Assertion Error

- Source Code

```
1 def divide(num1, num2):
2     assert num2 != 0, "Tidak dapat di bagi dengan nol"
3     return num1 / num2
4
5 try:
6     result = divide(100, 0)
7     print(result)
8 except AssertionError as error:
9     print(error)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Assertion_Error.py
Tidak dapat di bagi dengan nol
_
```

2. EOFError

- Source Code

```
1 try:
2     nama = input("Nama Lengkap: ")
3     address = input("Alamat: ")
4     if not address:
5         raise EOFError("tidak ada input yang diterima")
6
7     print("Nama Lengkap: " + nama)
8     print("Alamat: " + address)
9
10 except EOFError as error:
11     print(error)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py EOFError.py
Nama Lengkap: Ayu Nurul Khairunnisa
Alamat: Cirebon
Nama Lengkap: Ayu Nurul Khairunnisa
Alamat: Cirebon
```

3. Floatingpoint Error

- Source Code

```
1 import math
2
3 try:
4     result = math.sqrt(-1)
5     print(result)
6 except FloatingPointError as error:
7     print(error)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Floatingpoint_Error.py
Traceback (most recent call last):
  File "C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5\Floatingpoint_Error.py", line 4, in <module>
    result = math.sqrt(-1)
ValueError: math domain error
```

4. Generator Exit

- Source Code

```
1  def my_generator():
2      try:
3          yield 11
4          yield 12
5          yield 13
6      except GeneratorExit:
7          print("Generator stopped")
8
9  gen = my_generator()
10
11  print(next(gen))
12  print(next(gen))
13  gen.close()
14
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Generator_Exit.py
11
12
Generator stopped
```

5. Import Error

- Source Code

```
1  try:
2      import filetidakdiketahui
3  except ImportError as error:
4      print(error)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Import_Error.py
No module named 'filetidakdiketahui'
```

6. NotImplemented Error

- Source Code

```
1 class Handphone:
2     def sound(self):
3         raise NotImplementedError("Method 'sound' belum diimplementasikan")
4
5 class Samsung(Handphone):
6     def sound(self):
7         return "Samsung"
8
9 class Redmi(Handphone):
10    pass
11
12 def make_sound(handphone):
13     try:
14         return handphone.sound()
15     except NotImplementedError as error:
16         print(error)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py NotImplemented_Error.py
Samsung
Method 'sound' belum diimplementasikan
None
```

7. OS Error

- Source Code

```
1 try:
2     file = open("filebts.txt", "r")
3 except OSError as error:
4     print(error)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py OS_Error.py
[Errno 2] No such file or directory: 'filebts.txt'
```

8. Overflow Error

- Source Code

```
1 import sys
2
3 try:
4     a = sys.maxsize + 1
5     b = a * b
6 except OverflowError as error:
7     print(error)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Overflow_Error.py
Traceback (most recent call last):
  File "C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5\Overflow_Error.py", line 5, in <module>
    b = a * b
NameError: name 'b' is not defined
```

9. Recursive Error

- Source Code

```
1 def count_down(num):
2     print(num)
3     count_down(num - 1)
4
5 try:
6     count_down(100)
7 except RecursionError as error:
8     print(error)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Recursive_Error.py
100
99
98
97
96
95
94
93
92
91
90
89
88
87
86
```

```
-882
-883
-884
-885
-886
-887
-888
-889
-890
-891
-892
-893
-894
-895
maximum recursion depth exceeded while calling a Python object
```

10. Reference Error

- Source Code

```
1  ✓ def print_list(lst):
2  ✓     for item in lst:
3      |         print(item)
4
5  ✓ try:
6      |     print_list(undefined_list)
7  ✓ except ReferenceError as error:
8      |     print(error)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Reference_Error.py
Traceback (most recent call last):
  File "C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5\Reference_Error.py", line 6, in <module>
    print_list(undefined_list)
NameError: name 'undefined_list' is not defined
```

11. Runtime Error

- Source Code

```
1 def divide(a, y):
2     if y == 0:
3         raise RuntimeError("pembagian dengan 0")
4     else:
5         return a / y
6
7 try:
8     result = divide(10, 0)
9 except RuntimeError as error:
10    print(error)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Runtime_Error.py
pembagian dengan 0
```

12. Stop Async Iteration

- Source Code

```
1 import asyncio
2
3 async def countdown(num):
4     while num > 0:
5         print(num)
6         await asyncio.sleep(1)
7         num -= 1
8
9     raise StopAsyncIteration
10
11 async def main():
12     try:
13         await countdown(5)
14     except StopAsyncIteration:
15         print("Countdown stopped!")
16
17 asyncio.run(main())
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Stop_Async_Iteration.py
5
4
3
2
1
Countdown stopped!
```

13. Stop Iteration

- Source Code

```
1 my_list = [1, 2, 3, 4, 5]
2 my_iterator = iter(my_list)
3
4 try:
5     while True:
6         item = next(my_iterator)
7         print(item)
8         if item == 3:
9             raise StopIteration
10 except StopIteration:
11     print("Iteration stopped!")
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Stopiteration.py
1
2
3
Iteration stopped!
```

14. Syntax Error

- Source Code

```
1 try:
2     print("Selamat Datang!")
3 except SyntaxError:
4     print("Kesalahan sintaks terdeteksi!")
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py syntax_error.py
Selamat Datang!
```

15. System Error

- Source Code

```
1 def my_function(n):
2     if n <= 0:
3         raise SystemError("Jumlah iterasi harus lebih dari 0")
4     for i in range(n):
5         print(i)
6
7 try:
8     my_function(-1)
9 except SystemError as e:
10    print("Terjadi SystemError:", e)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py System_Error.py
Terjadi SystemError: Jumlah iterasi harus lebih dari 0
```

16. System Exit

- Source Code

```
1 import sys
2
3 try:
4     print("Program dimulai")
5     sys.exit()
6     print("Program selesai")
7 except SystemExit:
8     print("Program dihentikan")
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py System_Exit.py
Program dimulai
Program dihentikan
```

17. Tab Error

- Source Code

```
1 try:
2
3     for i in range(5):
4         print(i)
5         if i == 2:
6             print("Item ke-2")
7             print("Sedang dijalankan")
8 except TabError as e:
9     print("Terjadi TabError:", e)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Tab_Error.py
0
1
2
Item ke-2
Sedang dijalankan
3
4
```


18. Unboundlocal Error

- Source Code

```
1 def calculate_area(radius):
2     if radius <= 0:
3         raise ValueError("radius harus lebih besar dari 0.")
4     else:
5         try:
6             area = 3.14 * radius ** 2
7             print("Area lingkaran:", area)
8             radius = 0
9         except UnboundLocalError as e:
10            print("Error: ", e)
11            radius = 0
12
13    return radius
14
15    calculate_area(-5)
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Unboundlocal_Error.py
Traceback (most recent call last):
  File "C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5\Unboundlocal_Error.py", line 15, in <module>
    calculate_area(-5)
  File "C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5\Unboundlocal_Error.py", line 3, in calculate_area
    raise ValueError("radius harus lebih besar dari 0.")
ValueError: radius harus lebih besar dari 0.
```

19. Unicode Decode Error

- Source Code

```
1 try:
2     with open('file.txt', 'r', encoding='utf-8') as f:
3         contents = f.read()
4 except UnicodeDecodeError:
5     print("Error: Failed to decode the file with UTF-8 encoding")
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py unicode_decode_error.py
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5>
```

20. Unicode Encode Error

- Source Code

```
1 try:
2     with open('file.txt', 'w', encoding='ascii') as f:
3         f.write('Hallo, Dunia!')
4 except UnicodeEncodeError:
5     print("Error: Failed to encode the string with ASCII encoding")
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Unicode_Encode_Error.py
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5>
```

21. Unicode Error

- Source Code

```
1  def print_unicode_char(text):
2      try:
3          print(text.encode('ascii').decode('utf-8'))
4      except UnicodeError as e:
5          print("Error:", e)
6          print("Could not process Unicode character.")
7
8  print_unicode_char('Welcome Di Dunia!')
9  print_unicode_char('Welcome Di Dunia!')
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Unicode_Error.py
Welcome Di Dunia!
Welcome Di Dunia!
```

22. Unicode Translate Error

- Source Code

```
1  try:
2      s = '你好世界'
3      s.encode('ascii')
4  except UnicodeTranslateError:
5      print("Error: Failed to translate the string to ASCII encoding")
```

- Output

```
PS C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5> py Unicode_Translate_Error.py
Traceback (most recent call last):
  File "C:\KULIAH UMC\PBO LANJUT\EXCEPTION HANDLING\Tugas 5\Unicode_Translate_Error.py", line 3, in <module>
    s.encode('ascii')
UnicodeEncodeError: 'ascii' codec can't encode characters in position 0-3: ordinal not in range(128)
```