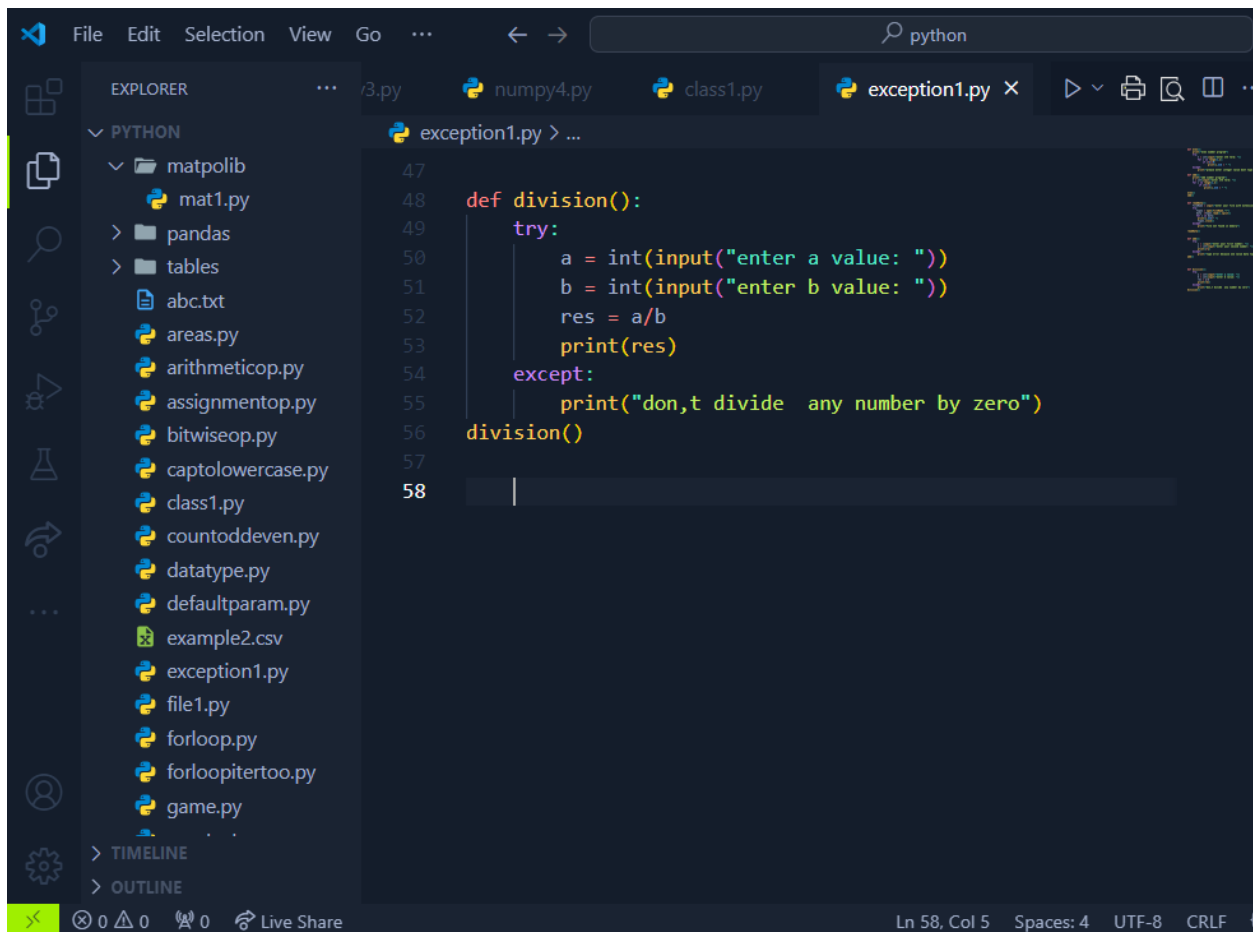


Lab assignment 7

Write a Python program to handle a ZeroDivisionError exception when dividing a number by zero.

Ans:



The screenshot shows a Visual Studio Code editor window with a Python file named `exception1.py` open. The file contains a function `division()` that prompts the user for two values, `a` and `b`, and attempts to divide `a` by `b`. The code uses a `try-except` block to catch a `ZeroDivisionError` and print a message: `print("don,t divide any number by zero")`. The file explorer on the left shows a project named `PYTHON` with various files and folders, including `matpolib`, `pandas`, `tables`, `abc.txt`, `areas.py`, `arithmeticop.py`, `assignmentop.py`, `bitwiseop.py`, `captolowercase.py`, `class1.py`, `countoddeven.py`, `datatype.py`, `defaultparam.py`, `example2.csv`, `exception1.py`, `file1.py`, `forloop.py`, `forloopitertoo.py`, and `game.py`. The status bar at the bottom indicates the current position is `Ln 58, Col 5` with `Spaces: 4`, `UTF-8` encoding, and `CRLF` line endings.

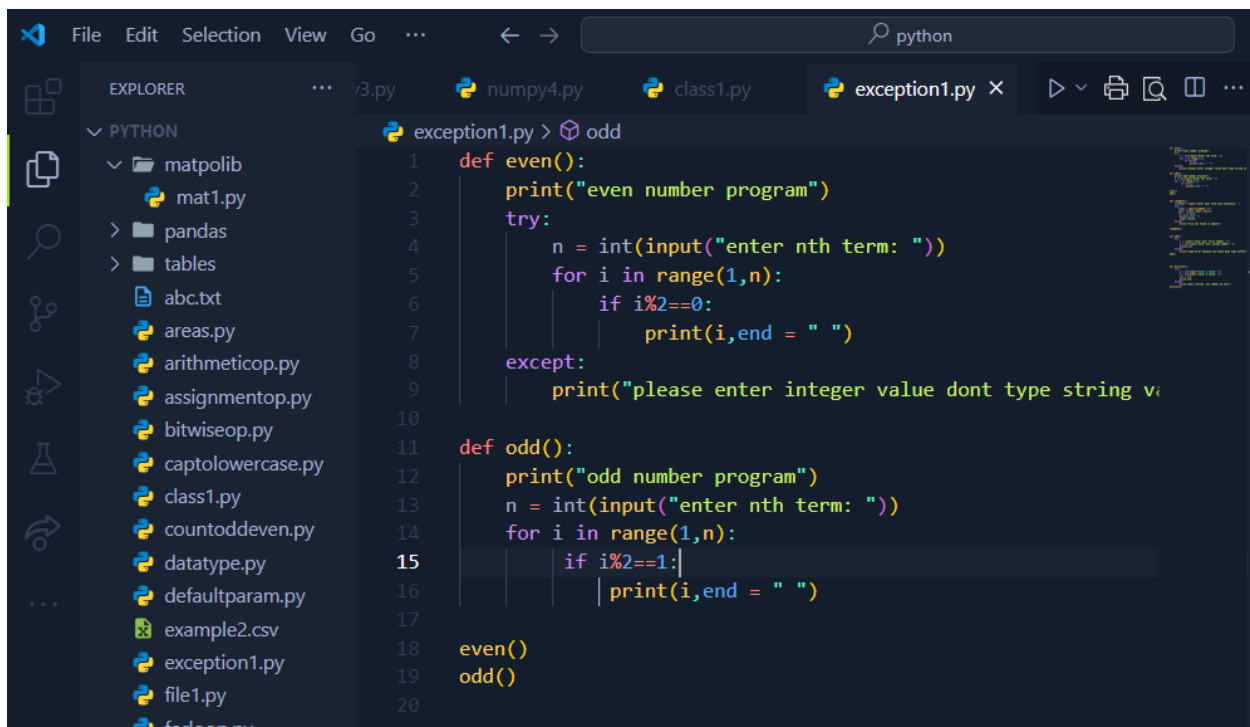
```
47
48 def division():
49     try:
50         a = int(input("enter a value: "))
51         b = int(input("enter b value: "))
52         res = a/b
53         print(res)
54     except:
55         print("don,t divide any number by zero")
56 division()
57
58
```

Output:

```
PS D:\python> python -u "d:\python\tempCodeRunnerFile.py"
enter a value: 10
enter b value: 0
don,t divide any number by zero
PS D:\python>
```

Write a Python program that prompts the user to input an integer and raises a ValueError exception if the input is not a valid integer.

Ans:



```
File Edit Selection View Go ... python
EXPLORER
PYTHON
  matpolib
    mat1.py
  pandas
  tables
  abc.txt
  areas.py
  arithmeticop.py
  assignmentop.py
  bitwiseop.py
  captolowercase.py
  class1.py
  countoddeven.py
  datatype.py
  defaultparam.py
  example2.csv
  exception1.py
  file1.py
  forloop.py

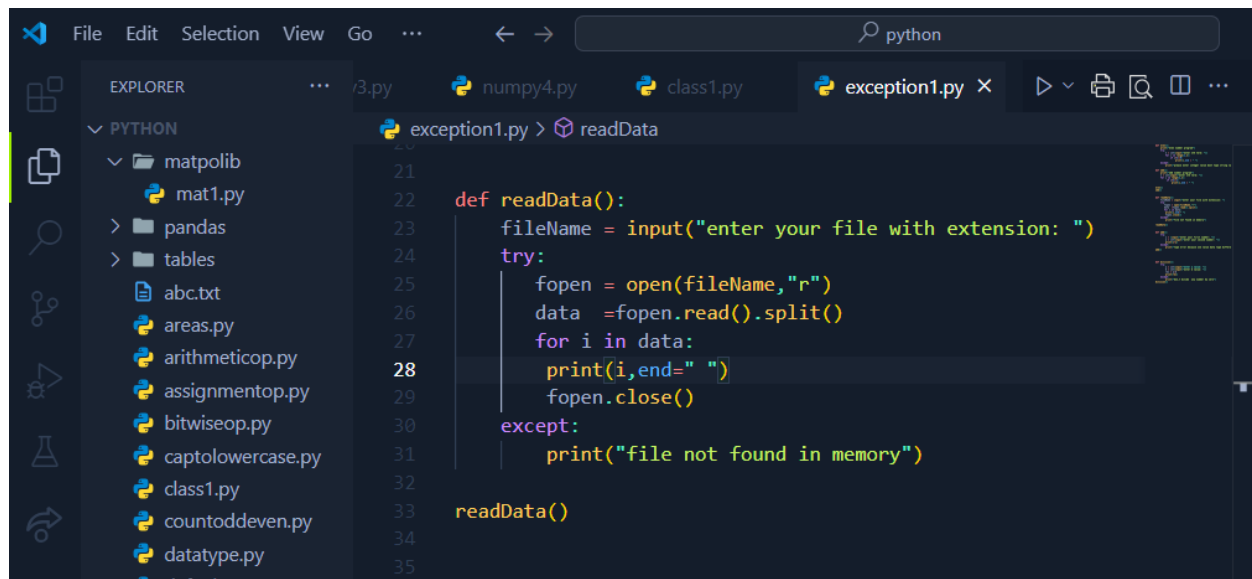
exception1.py > odd
1 def even():
2     print("even number program")
3     try:
4         n = int(input("enter nth term: "))
5         for i in range(1,n):
6             if i%2==0:
7                 print(i,end = " ")
8     except:
9         print("please enter integer value dont type string v
10
11 def odd():
12     print("odd number program")
13     n = int(input("enter nth term: "))
14     for i in range(1,n):
15         if i%2==1:
16             print(i,end = " ")
17
18 even()
19 odd()
20
```

Output:

```
PS D:\python> python -u "d:\python\exception1.py"
even number program
enter nth term: ten
please enter integer value d
ont type string value
odd number program
enter nth term: 
```

Write a Python program that opens a file and handles a FileNotFoundError exception if the file does not exist.

Ans:



The screenshot shows the Visual Studio Code editor with a file named `exception1.py` open. The code defines a function `readData()` that prompts the user for a filename, attempts to open it, and prints its contents. It includes a try-except block to handle the `FileNotFoundError` exception, printing "file not found in memory" if the file does not exist. The function is then called at the bottom of the file.

```
def readData():
    fileName = input("enter your file with extension: ")
    try:
        fopen = open(fileName,"r")
        data =fopen.read().split()
        for i in data:
            print(i,end=" ")
        fopen.close()
    except:
        print("file not found in memory")

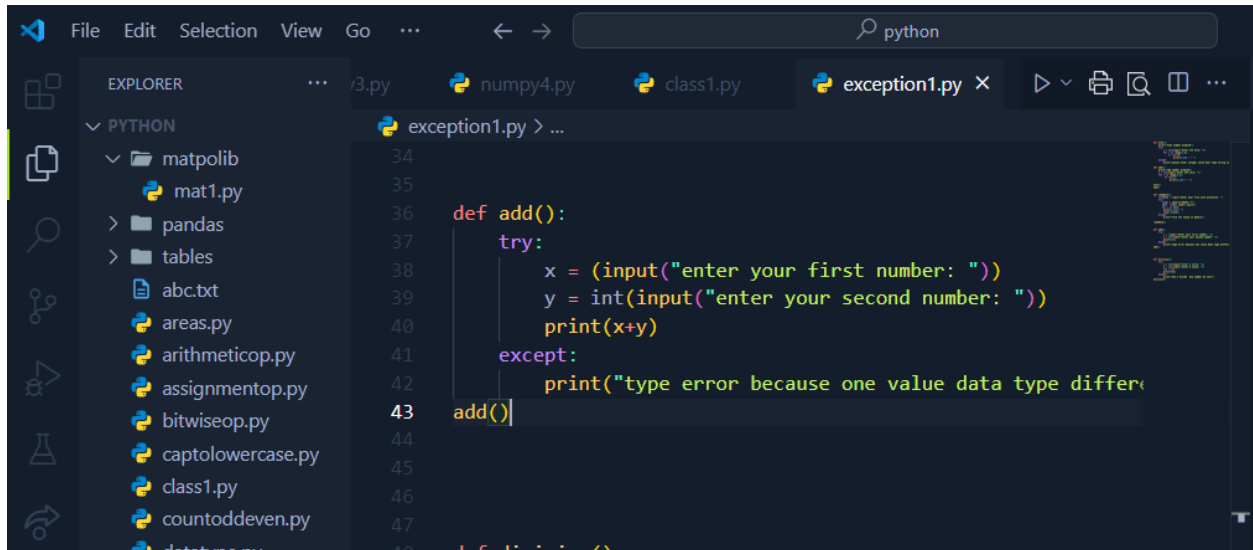
readData()
```

Output:

```
PS D:\python> python -u "d:\python\tempCodeRunnerFile.py"
enter your file with extension: Story1.txt
file not found in memory
PS D:\python> 
```

Q. Write a Python program that prompts the user to input two numbers and raises a `TypeError` exception if the inputs are not numerical:

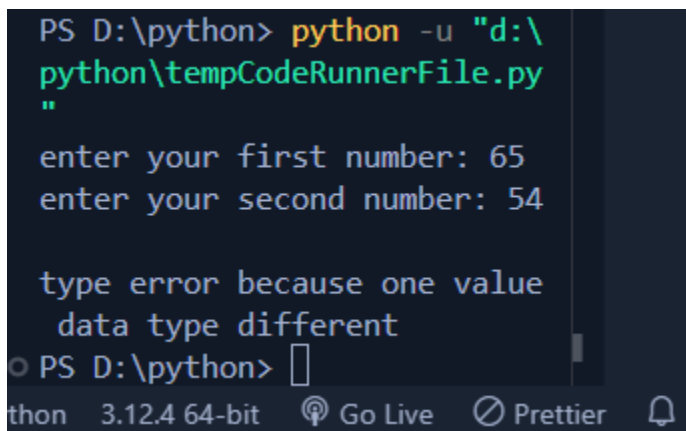
Ans:



The screenshot shows a code editor with a dark theme. The Explorer panel on the left shows a project structure with a 'PYTHON' folder containing various files. The main editor window displays the code for 'exception1.py'.

```
34
35
36 def add():
37     try:
38         x = (input("enter your first number: "))
39         y = int(input("enter your second number: "))
40         print(x+y)
41     except:
42         print("type error because one value data type differ")
43 add()
```

Output:



The screenshot shows a terminal window with the following output:

```
PS D:\python> python -u "d:\python\tempCodeRunnerFile.py"
enter your first number: 65
enter your second number: 54

type error because one value
data type different
PS D:\python>
```