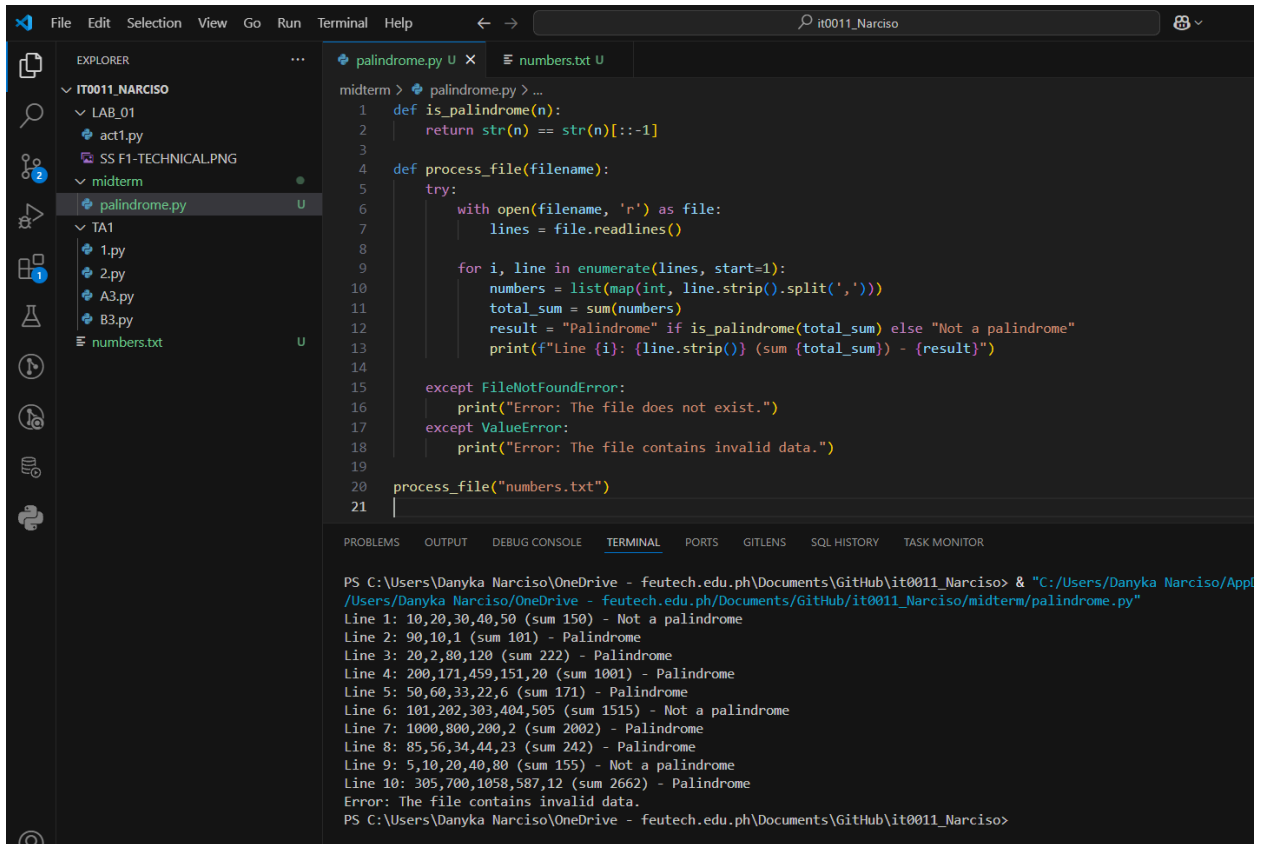


## 1. PALINDROME

```
def is_palindrome(n):  
    return str(n) == str(n)[::-1]  
  
def process_file(filename):  
    try:  
        with open(filename, 'r') as file:  
            lines = file.readlines()  
  
            for i, line in enumerate(lines, start=1):  
                numbers = list(map(int, line.strip().split(',')))  
                total_sum = sum(numbers)  
                result = "Palindrome" if is_palindrome(total_sum) else "Not a  
palindrome"  
                print(f"Line {i}: {line.strip()} (sum {total_sum}) -  
{result}")  
  
    except FileNotFoundError:  
        print("Error: The file does not exist.")  
    except ValueError:  
        print("Error: The file contains invalid data.")  
  
process_file("numbers.txt")
```

## OUTPUT:



The screenshot shows a Visual Studio Code editor 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 'IT0011\_NARCISO' with subfolders 'LAB\_01' and 'midterm'. The 'midterm' folder contains 'palindrome.py' and 'numbers.txt'. The code editor shows the contents of 'palindrome.py', which defines a function 'is\_palindrome(n)' and a function 'process\_file(filename)'. The terminal shows the output of running 'palindrome.py', which processes 'numbers.txt' and prints the result for each line.

```
def is_palindrome(n):
    return str(n) == str(n)[::-1]

def process_file(filename):
    try:
        with open(filename, 'r') as file:
            lines = file.readlines()

            for i, line in enumerate(lines, start=1):
                numbers = list(map(int, line.strip().split(',')))
                total_sum = sum(numbers)
                result = "Palindrome" if is_palindrome(total_sum) else "Not a palindrome"
                print(f"Line {i}: {line.strip()} (sum {total_sum}) - {result}")

    except FileNotFoundError:
        print("Error: The file does not exist.")
    except ValueError:
        print("Error: The file contains invalid data.")

process_file("numbers.txt")
```

PS C:\Users\Danyka Narciso\OneDrive - feutech.edu.ph\Documents\GitHub\it0011\_Narciso> & "C:/Users/Danyka Narciso/AppData/Local/Programs/Python/Python39-64/Python.exe" "C:/Users/Danyka Narciso/OneDrive - feutech.edu.ph/Documents/GitHub/it0011\_Narciso/midterm/palindrome.py"

Line 1: 10,20,30,40,50 (sum 150) - Not a palindrome  
Line 2: 90,10,1 (sum 101) - Palindrome  
Line 3: 20,2,80,120 (sum 222) - Palindrome  
Line 4: 200,171,459,151,20 (sum 1001) - Palindrome  
Line 5: 50,60,33,22,6 (sum 171) - Palindrome  
Line 6: 101,202,303,404,505 (sum 1515) - Not a palindrome  
Line 7: 1000,800,200,2 (sum 2002) - Palindrome  
Line 8: 85,56,34,44,23 (sum 242) - Palindrome  
Line 9: 5,10,20,40,80 (sum 155) - Not a palindrome  
Line 10: 305,700,1058,587,12 (sum 2662) - Palindrome  
Error: The file contains invalid data.  
PS C:\Users\Danyka Narciso\OneDrive - feutech.edu.ph\Documents\GitHub\it0011\_Narciso>

## 2. DATE TRANSLATION

```
from datetime import datetime

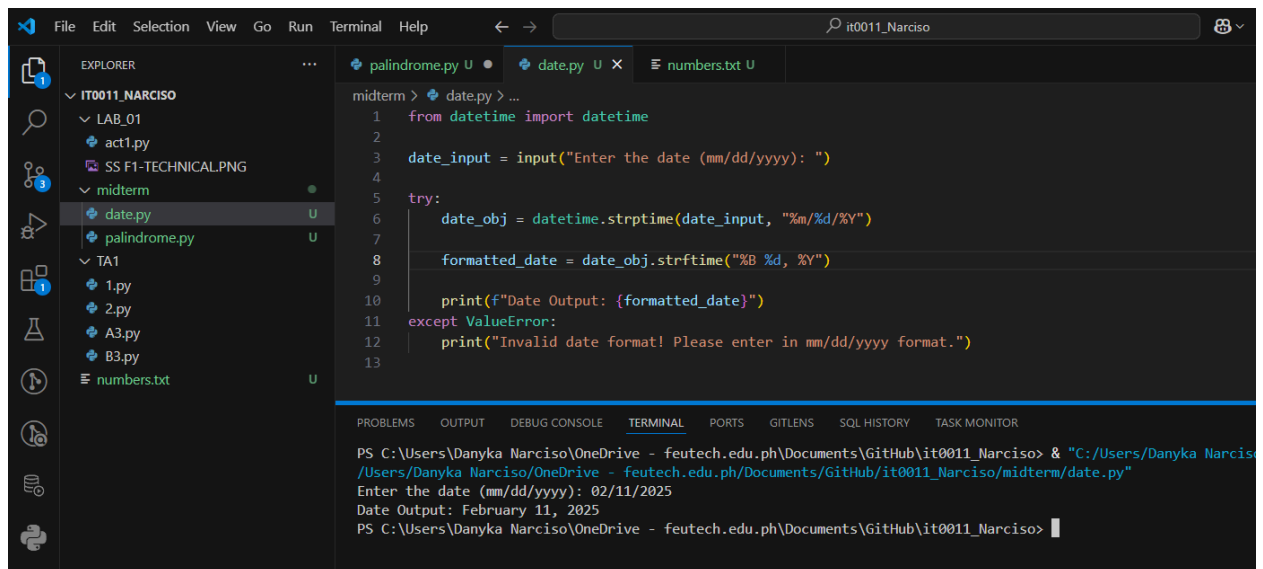
date_input = input("Enter the date (mm/dd/yyyy): ")

try:
    date_obj = datetime.strptime(date_input, "%m/%d/%Y")

    formatted_date = date_obj.strftime("%B %d, %Y")

    print(f>Date Output: {formatted_date}")
except ValueError:
    print("Invalid date format! Please enter in mm/dd/yyyy format.")
```

OUTPUT:



The screenshot displays the Visual Studio Code (VS Code) interface. On the left, the Explorer sidebar shows a project structure with folders 'LAB\_01' and 'midterm', and files 'act1.py', 'SS F1-TECHNICAL.PNG', 'date.py', 'palindrome.py', '1.py', '2.py', 'A3.py', 'B3.py', and 'numbers.txt'. The 'date.py' file is selected and open in the editor. The code in the editor matches the code block above. The bottom panel shows the TERMINAL output, which includes the command prompt, the command to run the script, the user input '02/11/2025', and the resulting output 'Date Output: February 11, 2025'.

```
midterm > date.py > ...
1  from datetime import datetime
2
3  date_input = input("Enter the date (mm/dd/yyyy): ")
4
5  try:
6      date_obj = datetime.strptime(date_input, "%m/%d/%Y")
7
8      formatted_date = date_obj.strftime("%B %d, %Y")
9
10     print(f>Date Output: {formatted_date}")
11 except ValueError:
12     print("Invalid date format! Please enter in mm/dd/yyyy format.")
13
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS SQL HISTORY TASK MONITOR

PS C:\Users\Danyka Narciso\OneDrive - feutech.edu.ph\Documents\GitHub\it0011\_Narciso> & "C:/Users/Danyka Narciso/OneDrive - feutech.edu.ph/Documents/GitHub/it0011\_Narciso/midterm/date.py"

Enter the date (mm/dd/yyyy): 02/11/2025

Date Output: February 11, 2025

PS C:\Users\Danyka Narciso\OneDrive - feutech.edu.ph\Documents\GitHub\it0011\_Narciso>