

Collo Paul Benedict V.

TW23

Technical Midterm Exam

Number 1:

```
1 def is_palindrome(value):
2     value_str = str(value)
3     reversed_str = "".join(reversed(value_str))
4     return value_str == reversed_str
5
6 with open("numbers.txt", "r") as file:
7     content = file.readlines()
8
9 line_number = 1
10 for line in content:
11     num_list = [int(num) for num in line.split(',') if num.strip().isdigit()]
12
13     if num_list:
14         total_sum = sum(num_list)
15         status = "This sum is a palindrome." if is_palindrome(total_sum) else "This sum is not a palindrome."
16         formatted_nums = ", ".join(map(str, num_list))
17
18         print(f"Line {line_number}: {formatted_nums} (Sum: {total_sum}) - {status}")
19
20     line_number += 1
21
```

```
> & C:/Users/bened/AppData/Local/Microsoft/WindowsF
Line 1: 10, 20, 30, 40, 50 (Sum: 150) - This sum is not a palindrome.
Line 2: 90, 10, 1 (Sum: 101) - This sum is a palindrome.
Line 3: 20, 2, 80, 120 (Sum: 222) - This sum is a palindrome.
Line 4: 200, 171, 459, 151, 20 (Sum: 1001) - This sum is a palindrome.
Line 5: 50, 60, 33, 22, 6 (Sum: 171) - This sum is a palindrome.
Line 6: 101, 202, 303, 404, 505 (Sum: 1515) - This sum is not a palindrome.
Line 7: 1000, 800, 200, 2 (Sum: 2002) - This sum is a palindrome.
Line 8: 85, 56, 34, 44, 23 (Sum: 242) - This sum is a palindrome.
Line 9: 5, 10, 20, 40, 80 (Sum: 155) - This sum is not a palindrome.
Line 10: 305, 700, 1058, 587, 12 (Sum: 2662) - This sum is a palindrome.
PS C:\Users\bened\OneDrive\Documents\GitHub\IT0011_Collo>
```

NUMBER 2:

```
1 date = input("Enter date (MM/DD/YY): ")
2
3 def convert_date_format(date):
4     month, day, year = date.split("/")
5
6     months = {
7         "01": "January", "02": "February", "03": "March", "04": "April",
8         "05": "May", "06": "June", "07": "July", "08": "August",
9         "09": "September", "10": "October", "11": "November", "12": "December"
10    }
11
12    month_name = months.get(month)
13    if not month_name:
14        print("Invalid month entered.")
15        return
16
17    year = "20" + year if len(year) == 2 else year
18
19    print(f"Date Output: {month_name} {int(day)}, {year}")
20
21 convert_date_format(date)
```

```
Enter date (MM/DD/YY): 05/18/05
Date Output: May 18, 2005
```