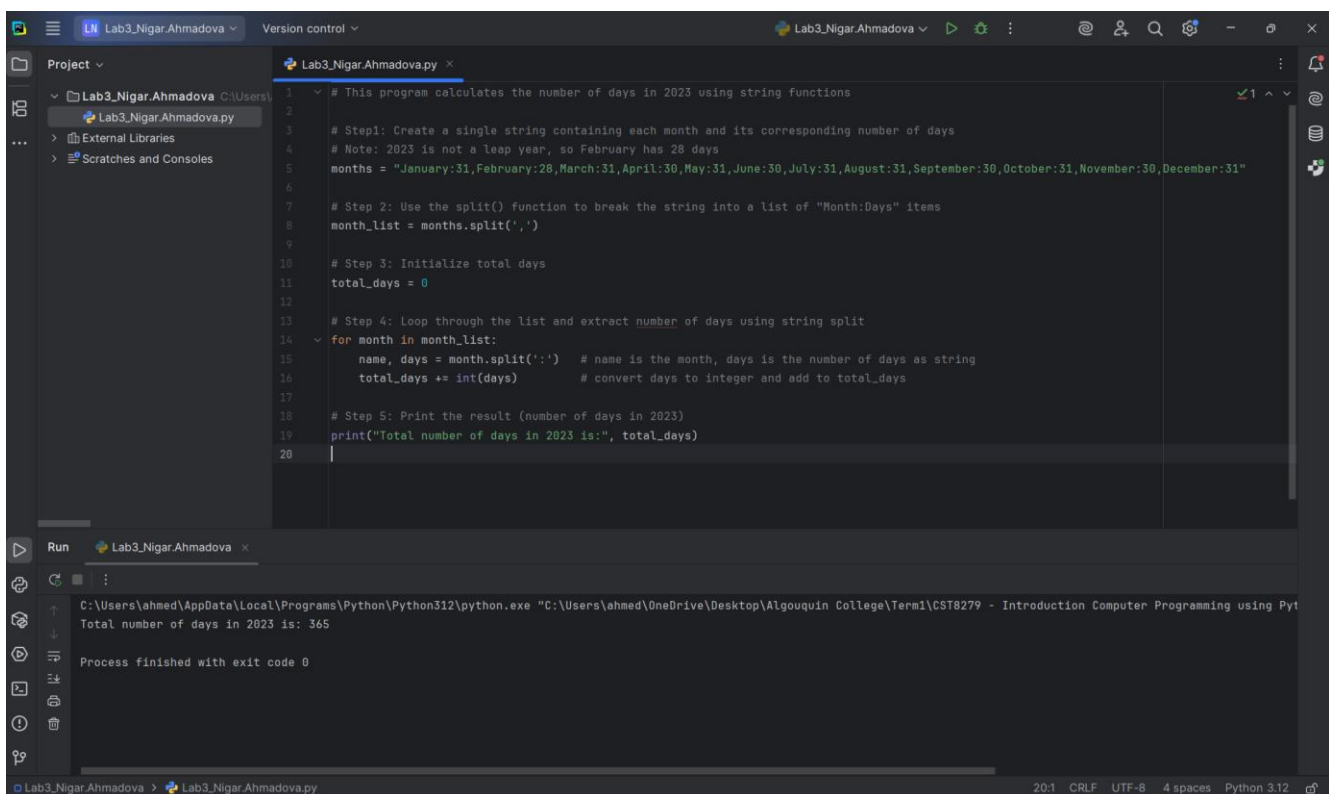


Date & Numeric Data Processing – Days in a Year Calculator

Description

A Python program that calculates the number of days in a given year using string functions and numeric logic. Combines mathematical reasoning with string manipulation for practical date handling. Demonstrates data processing and logical problem-solving.

The program that calculates the number of days in 2023 using string functions:



```
1 # This program calculates the number of days in 2023 using string functions
2
3 # Step1: Create a single string containing each month and its corresponding number of days
4 # Note: 2023 is not a leap year, so February has 28 days
5 months = "January:31,February:28,March:31,April:30,May:31,June:30,July:31,August:31,September:30,October:31,November:30,December:31"
6
7 # Step 2: Use the split() function to break the string into a list of "Month:Days" items
8 month_list = months.split(',')
9
10 # Step 3: Initialize total days
11 total_days = 0
12
13 # Step 4: Loop through the list and extract number of days using string split
14 for month in month_list:
15     name, days = month.split(':') # name is the month, days is the number of days as string
16     total_days += int(days)      # convert days to integer and add to total_days
17
18 # Step 5: Print the result (number of days in 2023)
19 print("Total number of days in 2023 is:", total_days)
20
```

Run Lab3_Nigar.Ahmadova

C:\Users\ahmed\AppData\Local\Programs\Python\Python312\python.exe "C:\Users\ahmed\OneDrive\Desktop\Algouquin College\Term1\CST8279 - Introduction Computer Programming using Pyt
Total number of days in 2023 is: 365

Process finished with exit code 0

Lab3_Nigar.Ahmadova > Lab3_Nigar.Ahmadova.py 20:1 CRLF UTF-8 4 spaces Python 3.12