

Course: CSC 371 - Finite Automata

Topic: Unit 1 - Regular Expression

Submitted by: Malika Hafiza Pasha [CSUDH ID: 212238171]

1. Create a program to validate an email using regular expression. Your program should take an email address and output if that email is valid. Any programming language. State the library you used.

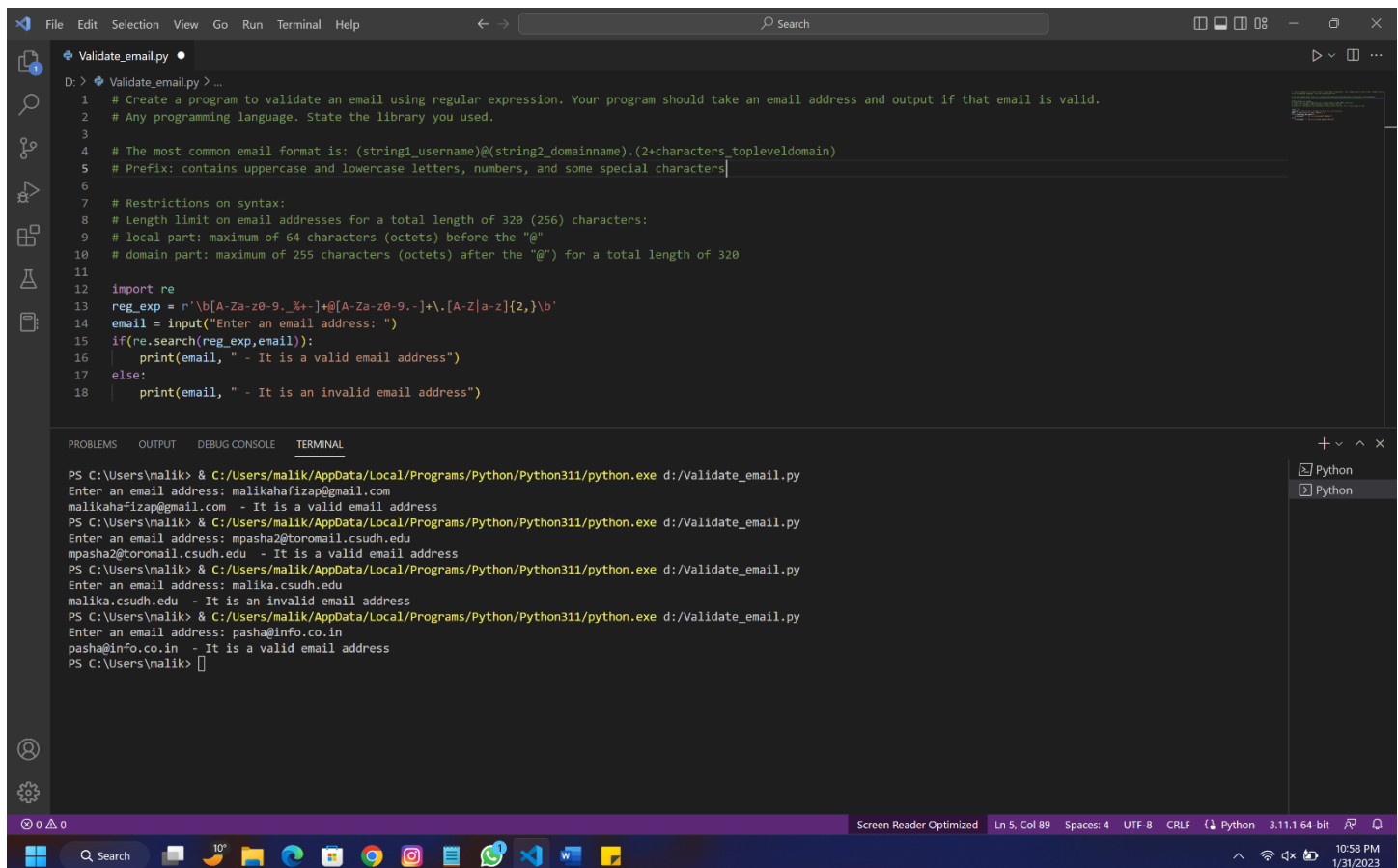
Answer:

Programming Language used: Python

Library used: Regular Expression

Regular Expression: RE specifies a set of strings that correspond to it. This module's functions determine how well a given string matches a given regular expression.

Code:



```
File Edit Selection View Go Run Terminal Help
Validate_email.py
D:\> Validate_email.py > ...
1 # Create a program to validate an email using regular expression. Your program should take an email address and output if that email is valid.
2 # Any programming language. State the library you used.
3
4 # The most common email format is: (string1_username)@(string2_domainname).(2+characters_topleveldomain)
5 # Prefix: contains uppercase and lowercase letters, numbers, and some special characters
6
7 # Restrictions on syntax:
8 # Length limit on email addresses for a total length of 320 (256) characters:
9 # local part: maximum of 64 characters (octets) before the "@"
10 # domain part: maximum of 255 characters (octets) after the "@" for a total length of 320
11
12 import re
13 reg_exp = r'\b[A-Za-z0-9_%+]+@[A-Za-z0-9-]+\.[A-Z|a-z]{2,}\b'
14 email = input("Enter an email address: ")
15 if re.search(reg_exp, email):
16     print(email, " - It is a valid email address")
17 else:
18     print(email, " - It is an invalid email address")

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\malik> & C:/Users/malik/AppData/Local/Programs/Python/Python311/python.exe d:/Validate_email.py
Enter an email address: malikahafizap@gmail.com
malikahafizap@gmail.com - It is a valid email address
PS C:\Users\malik> & C:/Users/malik/AppData/Local/Programs/Python/Python311/python.exe d:/Validate_email.py
Enter an email address: mpasha2@toromail.csudh.edu
mpasha2@toromail.csudh.edu - It is a valid email address
PS C:\Users\malik> & C:/Users/malik/AppData/Local/Programs/Python/Python311/python.exe d:/Validate_email.py
Enter an email address: malika.csudh.edu
malika.csudh.edu - It is an invalid email address
PS C:\Users\malik> & C:/Users/malik/AppData/Local/Programs/Python/Python311/python.exe d:/Validate_email.py
Enter an email address: pasha@info.co.in
pasha@info.co.in - It is a valid email address
PS C:\Users\malik>
```