

**Objective:**

This program simulates a voter registration application. It takes in user input and stores the supplied information in appropriate variables. If a user inputs an incorrect response the program will either re-prompt or exit with an explanation for the exit. Program makes use of the built in python libraries of sys and regex as well as functions, dictionaries, classes and exception handling.

**Case Studies:**

There could be many instances of case studies given that there are a multitude of inputs but the ones listed are those that throw an error and reprompt or cause an exit. Here are the test cases:

Test Cases	Prompt:	User Input:	Expected Output:	Actual Output:	Pass/Fail:
1	Would you like to continue registration, yes/no?	random key input	Please enter yes or no' reprompt	Please enter yes or no' reprompt	Pass, see Fig1
2	Would you like to continue registration, yes/no?	No, NO, n, N, nO, no, or other variation	Thank you for using the Voter Registration Application, you have chosen to exit.'	Thank you for using the Voter Registration Application, you have chosen to exit.'	Pass, see Fig. 2
3	Would you like to continue registration, yes/no?	Yes, YEs, YES, yes, Y, y or other variation	Next prompt, 'Are you a U.S. Citizen?'	Are you a U.S. Citizen?'	Pass, see Fig. 3
4	Are you a U.S. Citizen	random key input, Noo	Please enter yes or no' reprompt	Please enter yes or no' reprompt	Pass, see Fig. 4
5	Are you a U.S. Citizen	No, NO, n, N, nO, no, or other variation	ERROR: Sorry, U.S. Citizenship required to register.' -exit program	ERROR: Sorry, U.S. Citizenship required to register.' -exit program	Pass, see Fig. 5
6	Are you a U.S. Citizen	Yes, YEs, YES, yes, Y, y or other variation	Would you like to continue registration, yes/no? , enter age	Would you like to continue registration, yes/no? , enter age	Pass, see Fig. 6
7	Please enter age:	random key input, thirty	Please verify age entered.	Please verify age entered.	Pass, see Fig. 7

	8 Please enter age:	13	You must be over the age of 18 to register.	You must be over the age of 18 to register.	Pass, see Fig. 8
9a	Please enter age:	120	You entered: 120' verify, y/n	--See below	
9b		Yes, YEs, YES, yes, Y, y or other variation	Thank you for verifying	Thank you for verifying	Pass, see Fig. 9
9c		No, NO, n, N, nO, no, random key entry or other variation	Ask to re-enter age	Ask to re-enter age	Pass, see Fig. 9
	10 Enter First Name:	Anything that includes numbers or special characters.	Please verify entered name	Please verify entered name	Pass, see Fig. 10
	11 Enter First Name:	corey	Continue, Enter last name	Continue, Enter last name	Pass, see Fig. 10
	12 Enter Last Name:	Anything that includes numbers or special characters.	Please verify entered name, enter first name	Please verify entered name, enter first name	Pass, see Fig. 11
	13 Enter Last Name:	glover	Continue, Enter State	Continue, Enter State	Pass, see Fig. 12
	14 Enter State:	random key input, Texas	Please verify state of residency(Form at in (eg. Texas = TX).	Please verify state of residency(Form at in (eg. Texas = TX).	Pass, see Fig. 12
	18 Enter State:	TX	Continue, Enter Zipcode	Continue, Enter Zipcode	Pass, see Fig. 13
	19 Enter Zipcode:	random key input, 777, 777777, 77777-77, 77777-001, 77777-77777	Please Verify zipcode, reprompt	Please Verify zipcode, reprompt	Pass, see Fig. 13
	20 Enter Zipcode:	12345 77777-7777	Thank you message, prints output, exit	Thank you message, prints output, exit	Pass, see Fig. 14 & Fig. 15

Screen captures:

Below are screen captures as they refer to the test cases above.

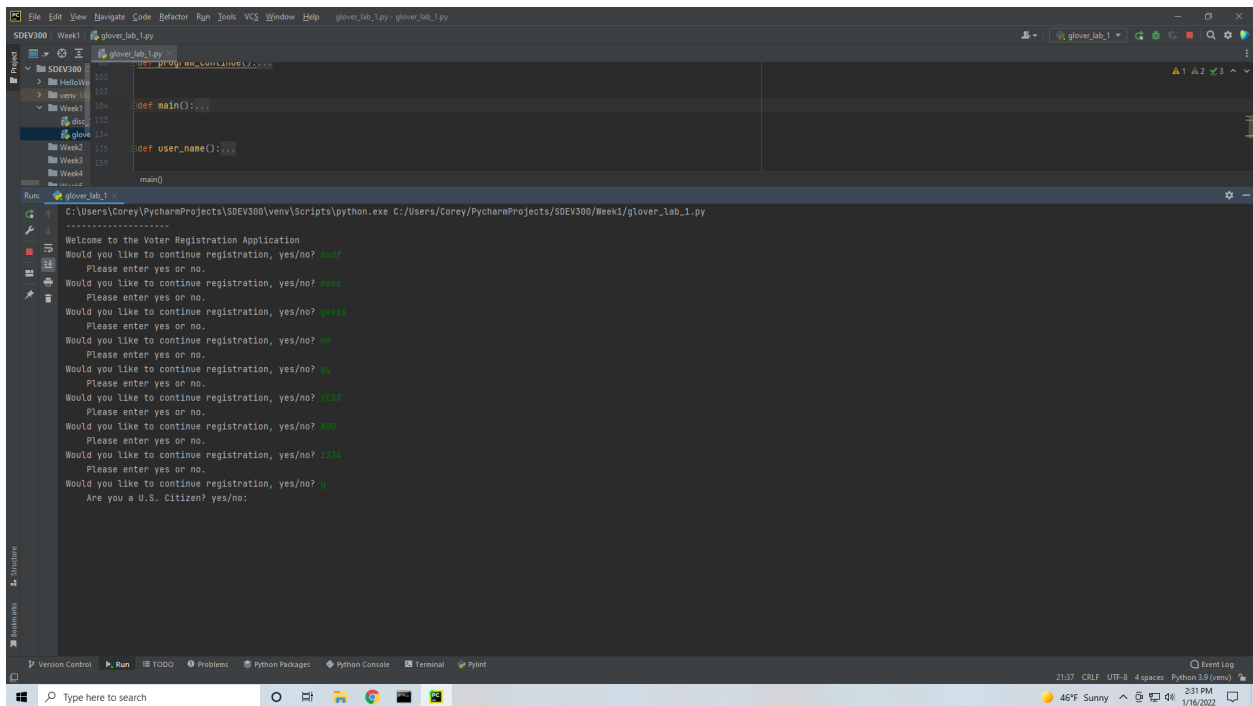


Fig. 1

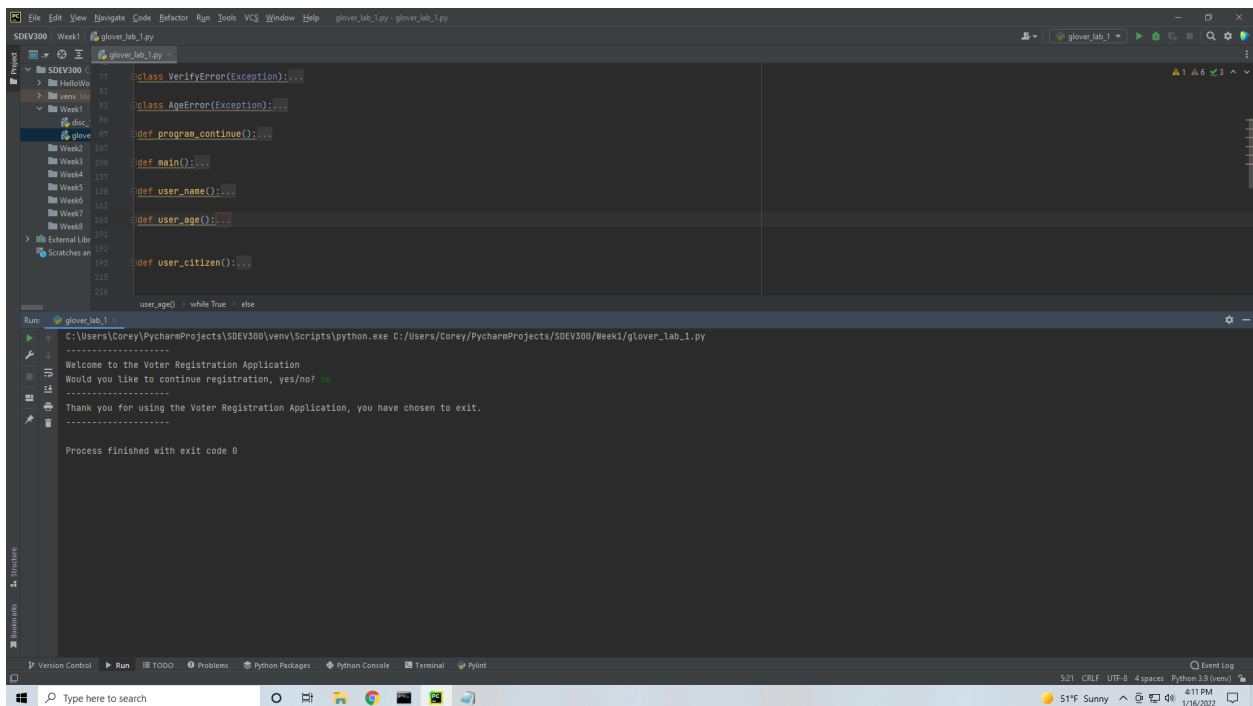


Fig. 2

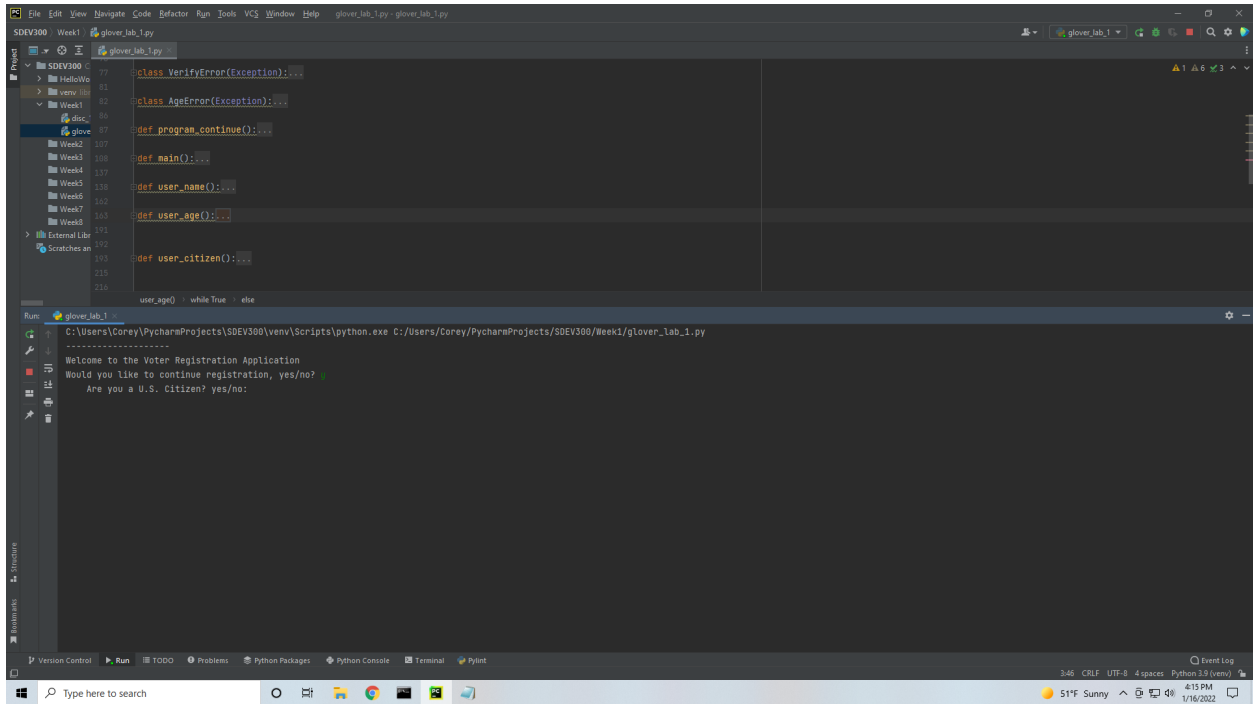


Fig. 3

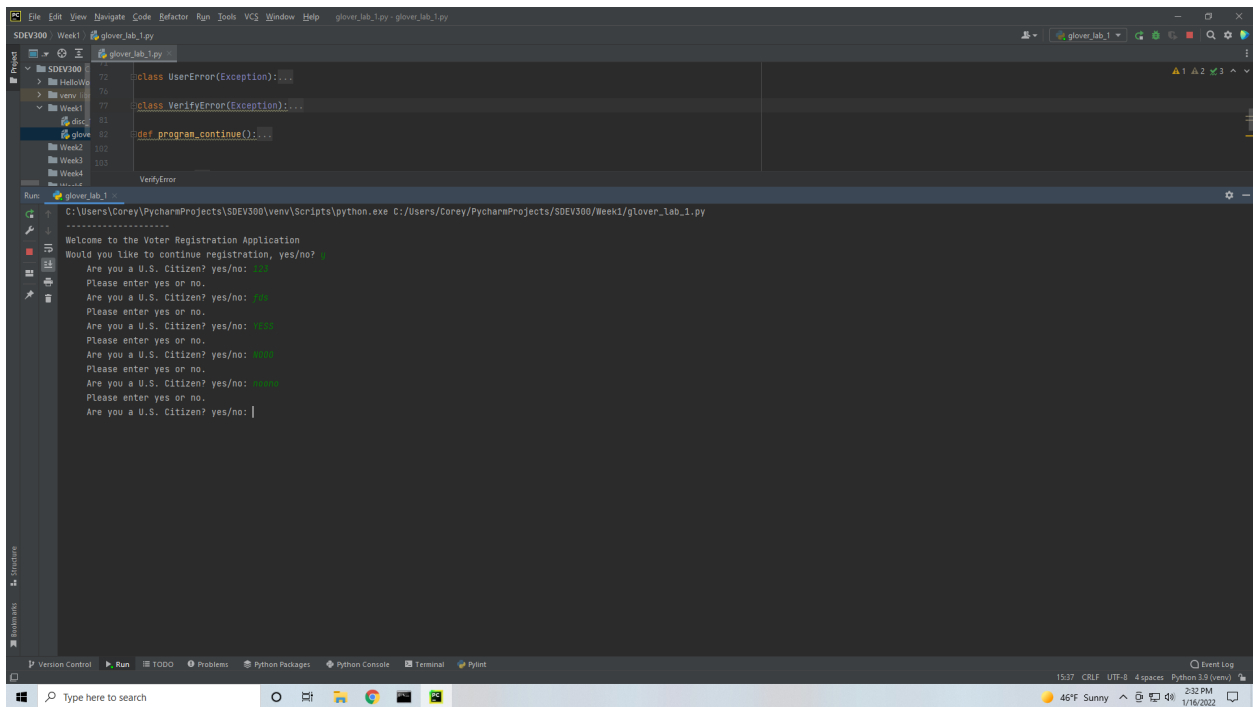


Fig. 4

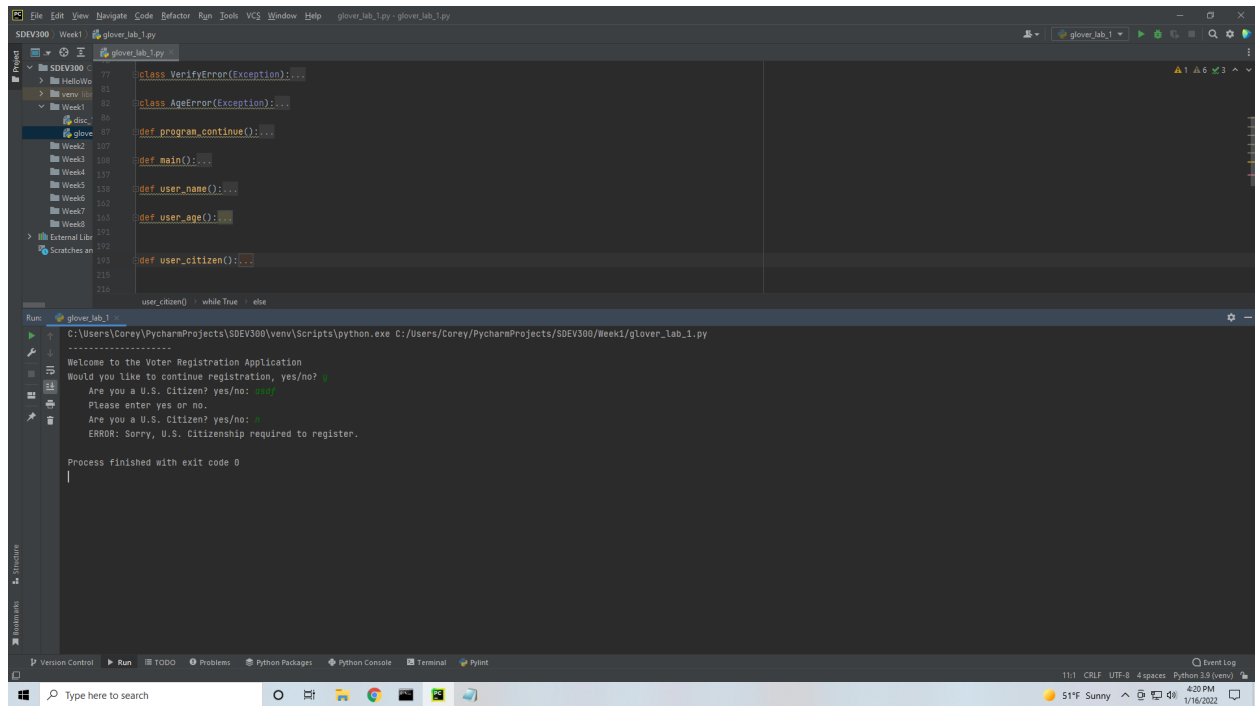


Fig. 5

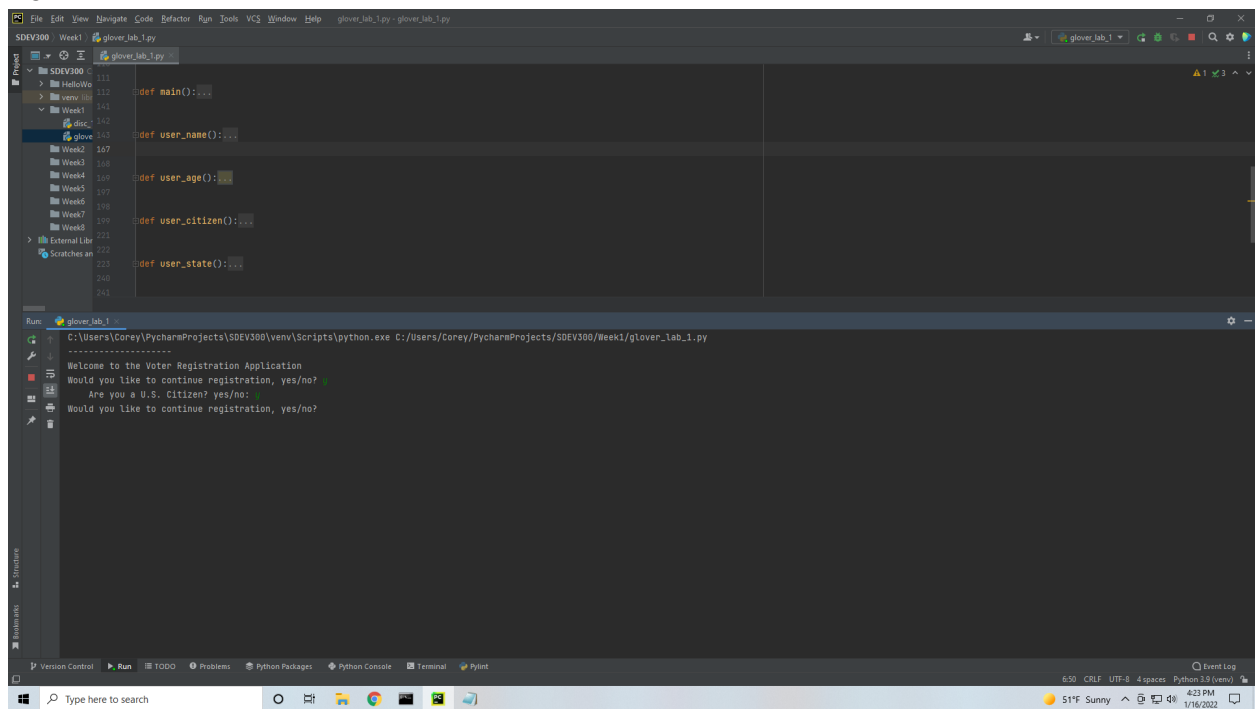
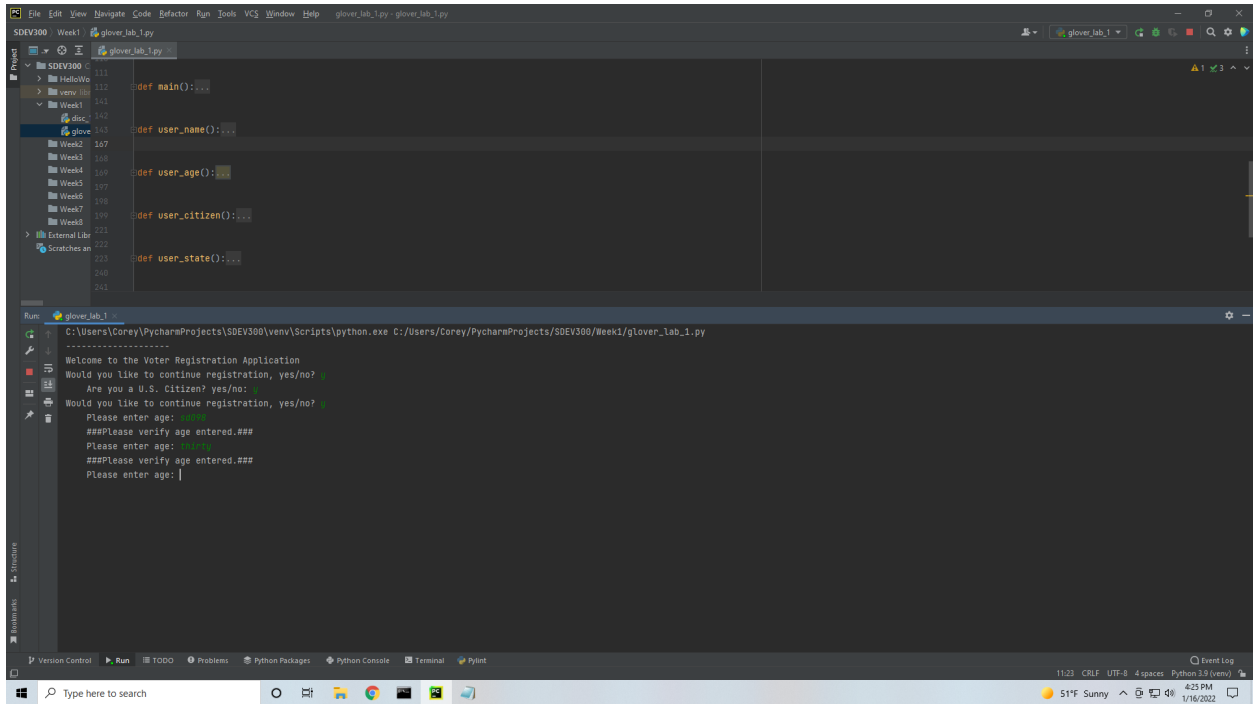


Fig. 6

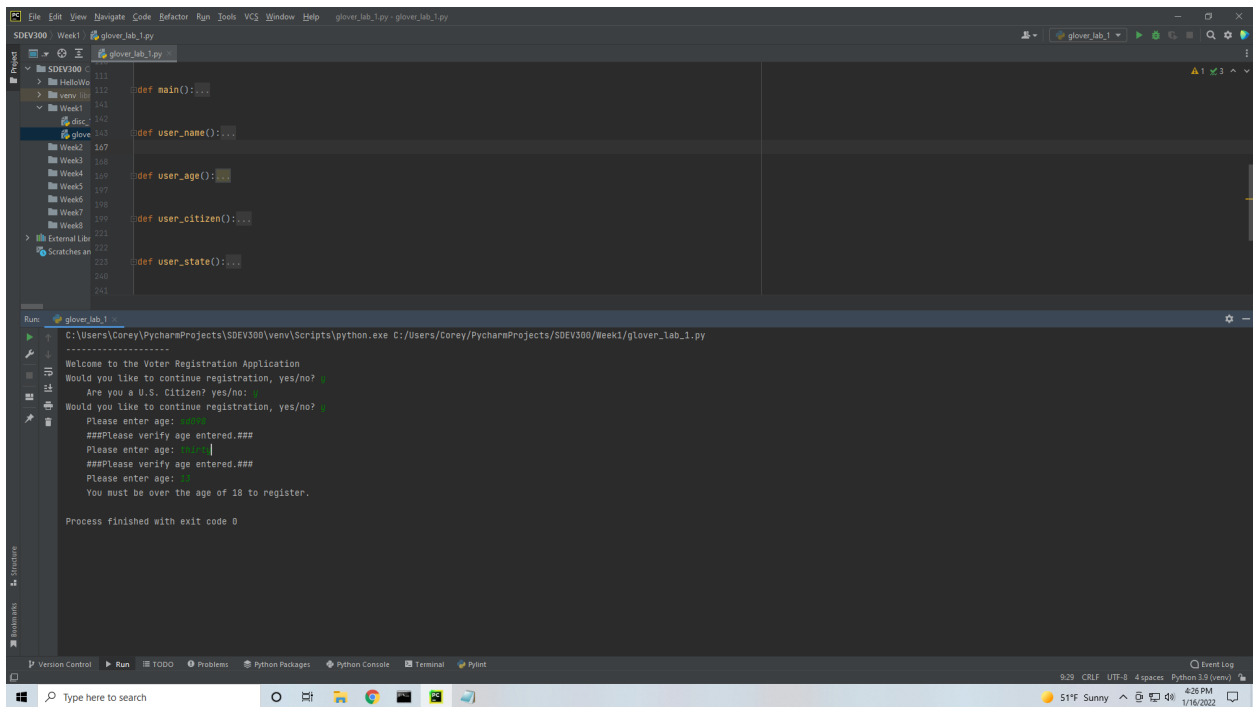


```
def main():  
    def user_name():  
    def user_age():  
    def user_citizen():  
    def user_state():
```

Run: glover\_lab\_1

```
C:\Users\Corey\PycharmProjects\SDEV300\venv\Scripts\python.exe C:/Users/Corey/PycharmProjects/SDEV300/Week1/glover_lab_1.py  
Welcome to the Voter Registration Application  
Would you like to continue registration, yes/no?   
Are you a U.S. Citizen? yes/no:  
Would you like to continue registration, yes/no?   
Please enter age:   
##Please verify age entered.##  
Please enter age:   
##Please verify age entered.##  
Please enter age: |
```

Fig. 7

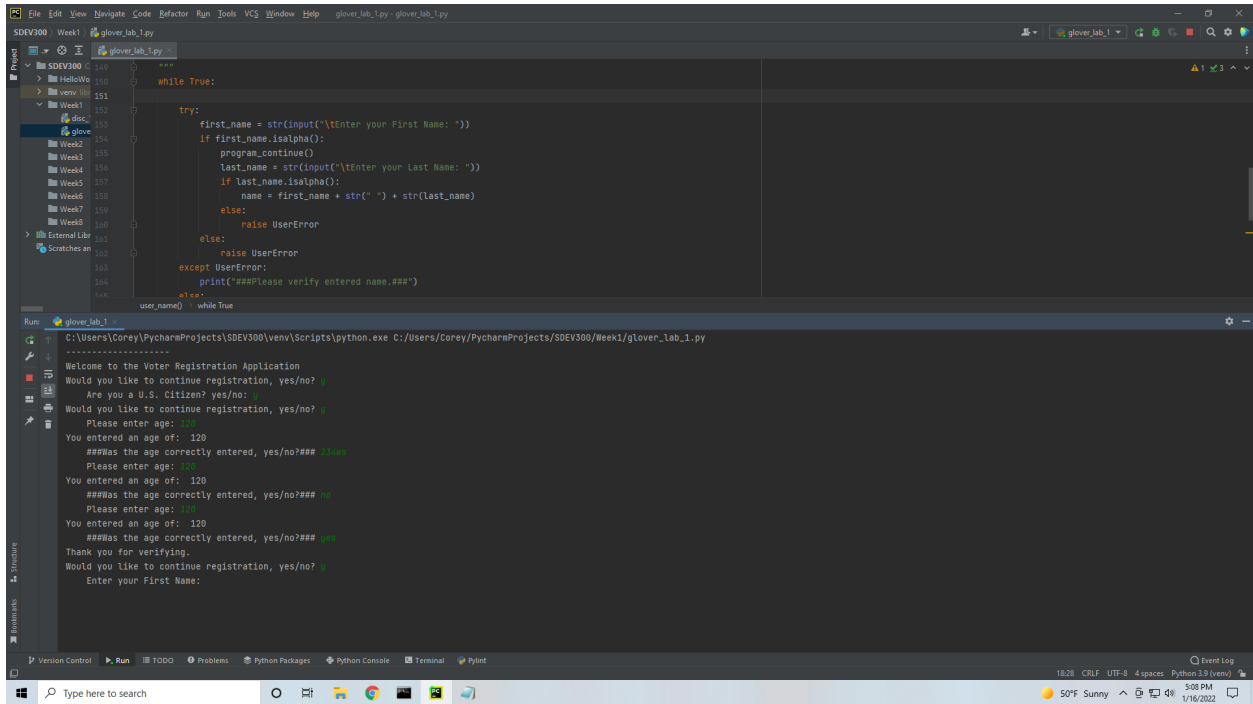


```
def main():  
    def user_name():  
    def user_age():  
    def user_citizen():  
    def user_state():
```

Run: glover\_lab\_1

```
C:\Users\Corey\PycharmProjects\SDEV300\venv\Scripts\python.exe C:/Users/Corey/PycharmProjects/SDEV300/Week1/glover_lab_1.py  
Welcome to the Voter Registration Application  
Would you like to continue registration, yes/no?   
Are you a U.S. Citizen? yes/no:  
Would you like to continue registration, yes/no?   
Please enter age: yes  
##Please verify age entered.##  
Please enter age: 18  
##Please verify age entered.##  
Please enter age:  
You must be over the age of 18 to register.  
  
Process finished with exit code 0
```

Fig. 8

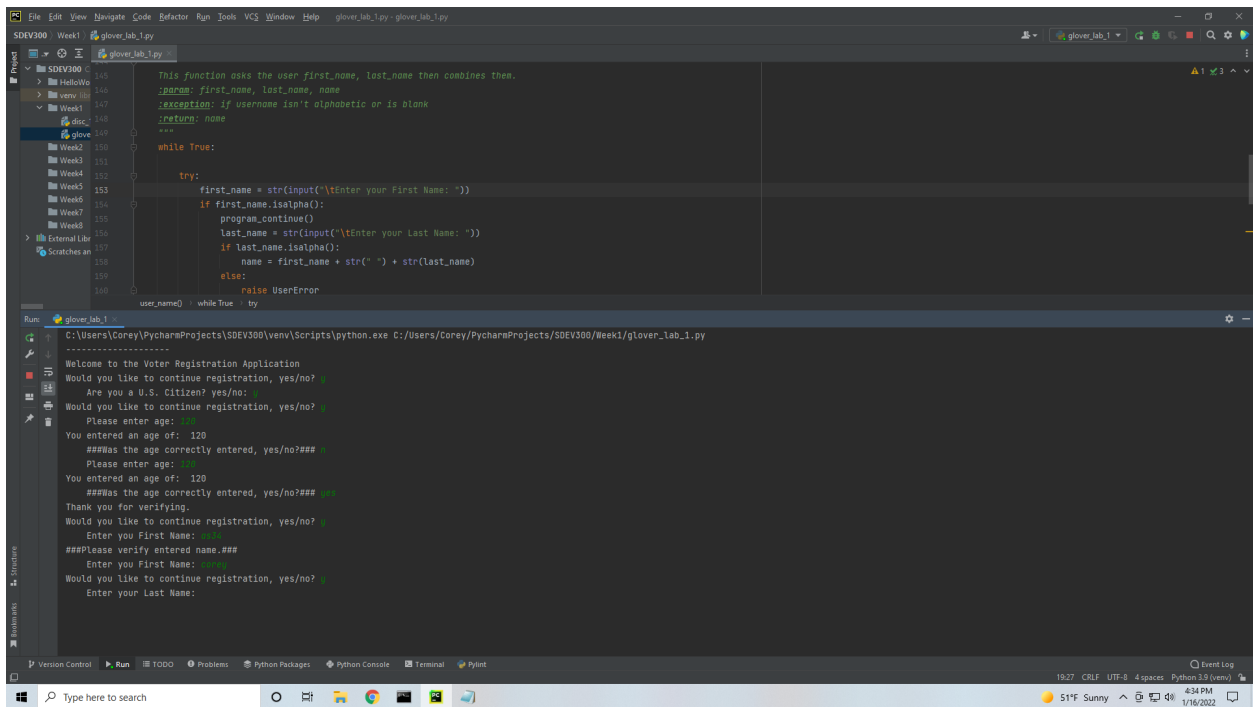


```
File Edit View Navigate Code Refactor Run Tools VCS Window Help
SDEV300 Week1 glover_lab_1.py
Project: SDEV300
glover_lab_1.py
149
150
151 while True:
152
153     try:
154         first_name = str(input("\nEnter your First Name: "))
155         if first_name.isalpha():
156             program_continue()
157         last_name = str(input("\nEnter your Last Name: "))
158         if last_name.isalpha():
159             name = first_name + str(' ') + str(last_name)
160         else:
161             raise UserError
162     except UserError:
163         print("###Please verify entered name.###")
164
165     user_name()
166     while True:
```

Run: C:\Users\Corey\PycharmProjects\SDEV300\venv\Scripts\python.exe C:/Users/Corey/PycharmProjects/SDEV300/Week1/glover\_lab\_1.py

```
#####
Welcome to the Voter Registration Application
Would you like to continue registration, yes/no? y
Are you a U.S. Citizen? yes/no:
Would you like to continue registration, yes/no? y
Please enter age: 120
You entered an age of: 120
###Was the age correctly entered, yes/no?### yes
Please enter age: 120
You entered an age of: 120
###Was the age correctly entered, yes/no?### no
Please enter age: 120
You entered an age of: 120
###Was the age correctly entered, yes/no?### yes
Thank you for verifying.
Would you like to continue registration, yes/no? y
Enter your First Name:
Enter your Last Name:
```

Fig. 9

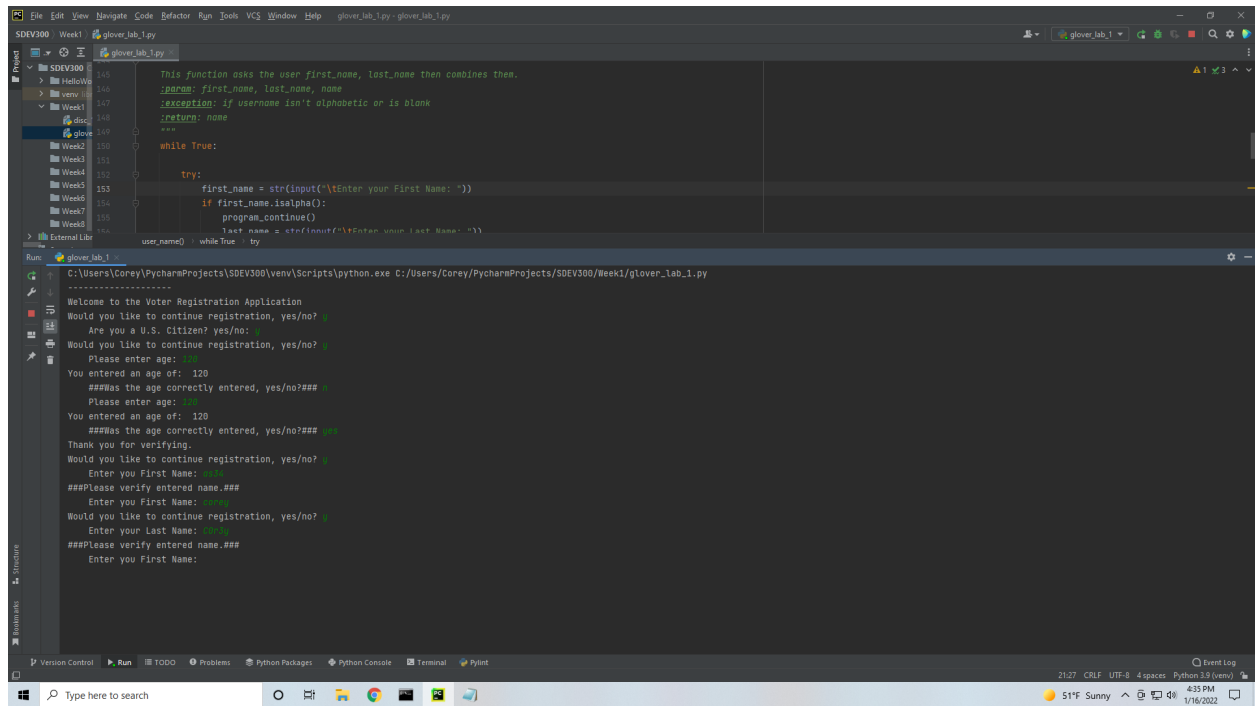


```
File Edit View Navigate Code Refactor Run Tools VCS Window Help
SDEV300 Week1 glover_lab_1.py
Project: SDEV300
glover_lab_1.py
149
150
151 while True:
152
153     try:
154         first_name = str(input("\nEnter your First Name: "))
155         if first_name.isalpha():
156             program_continue()
157         last_name = str(input("\nEnter your Last Name: "))
158         if last_name.isalpha():
159             name = first_name + str(' ') + str(last_name)
160         else:
161             raise UserError
162     except UserError:
163         print("###Please verify entered name.###")
164
165     user_name()
166     while True:
```

Run: C:\Users\Corey\PycharmProjects\SDEV300\venv\Scripts\python.exe C:/Users/Corey/PycharmProjects/SDEV300/Week1/glover\_lab\_1.py

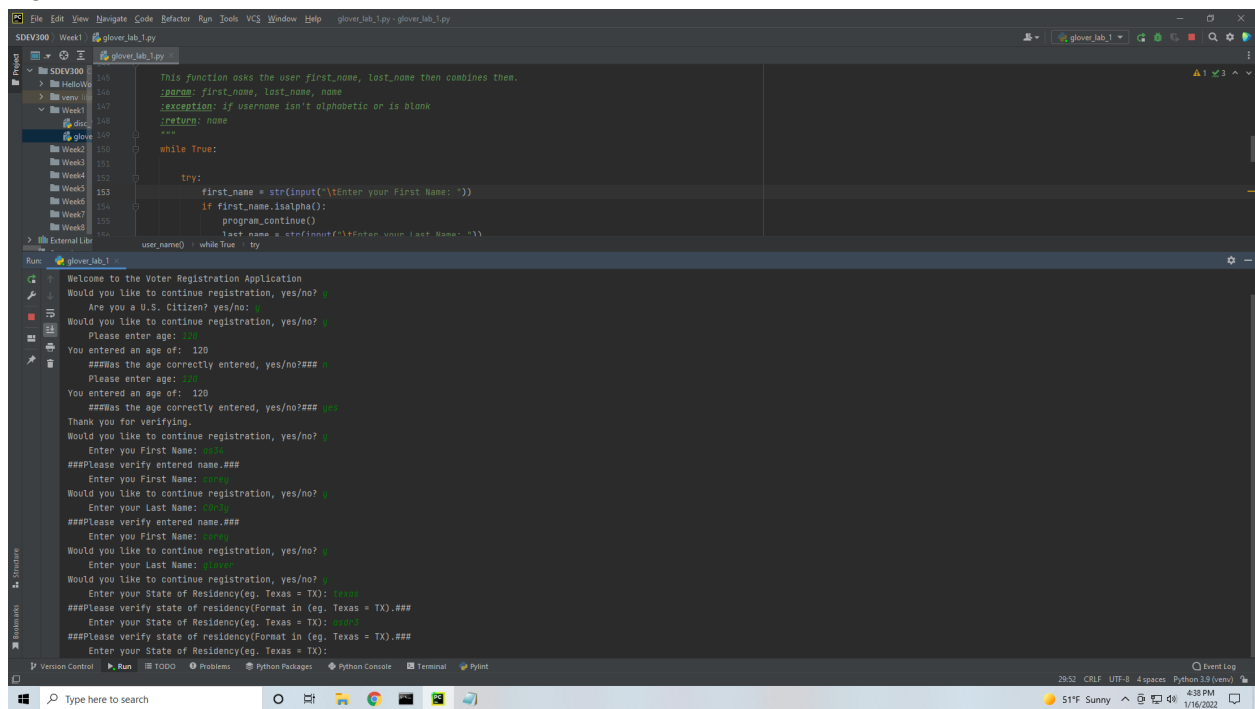
```
#####
Welcome to the Voter Registration Application
Would you like to continue registration, yes/no? y
Are you a U.S. Citizen? yes/no:
Would you like to continue registration, yes/no? y
Please enter age: 120
You entered an age of: 120
###Was the age correctly entered, yes/no?### yes
Please enter age: 120
You entered an age of: 120
###Was the age correctly entered, yes/no?### no
Thank you for verifying.
Would you like to continue registration, yes/no? y
Enter your First Name:
Enter your Last Name:
```

Fig. 10



```
File Edit View Navigate Code Refactor Run Tools VCS Window Help glover_lab_1.py - glover_lab_1.py
SDEV300 Week1 glover_lab_1.py
Project: SDEV300
  > SDEV300
  > Helio
  > venv
  > Week1
  > Week2
  > Week3
  > Week4
  > Week5
  > Week6
  > Week7
  > Week8
  > ExternalLib
  > glover_lab_1.py
Run: glover_lab_1.py
C:\Users\Corey\PycharmProjects\SDEV300\venv\Scripts\python.exe C:/Users/Corey/PycharmProjects/SDEV300/Week1/glover_lab_1.py
Welcome to the Voter Registration Application
Would you like to continue registration, yes/no? y
Are you a U.S. Citizen? yes/no: y
Would you like to continue registration, yes/no? y
Please enter age: 120
You entered an age of: 120
##Was the age correctly entered, yes/no### y
Please enter age: 120
You entered an age of: 120
##Was the age correctly entered, yes/no### y
Thank you for verifying.
Would you like to continue registration, yes/no? y
Enter your First Name: Corey
##Please verify entered name.##
Enter your First Name: Corey
Would you like to continue registration, yes/no? y
Enter your Last Name: Glover
##Please verify entered name.##
Enter your First Name: Corey
```

Fig. 11



```
File Edit View Navigate Code Refactor Run Tools VCS Window Help glover_lab_1.py - glover_lab_1.py
SDEV300 Week1 glover_lab_1.py
Project: SDEV300
  > SDEV300
  > Helio
  > venv
  > Week1
  > Week2
  > Week3
  > Week4
  > Week5
  > Week6
  > Week7
  > Week8
  > ExternalLib
  > glover_lab_1.py
Run: glover_lab_1.py
Welcome to the Voter Registration Application
Would you like to continue registration, yes/no? y
Are you a U.S. Citizen? yes/no: y
Would you like to continue registration, yes/no? y
Please enter age: 120
You entered an age of: 120
##Was the age correctly entered, yes/no### y
Please enter age: 120
You entered an age of: 120
##Was the age correctly entered, yes/no### y
Thank you for verifying.
Would you like to continue registration, yes/no? y
Enter your First Name: Corey
##Please verify entered name.##
Enter your First Name: Corey
Would you like to continue registration, yes/no? y
Enter your Last Name: Glover
##Please verify entered name.##
Enter your First Name: Corey
Would you like to continue registration, yes/no? y
Enter your Last Name: Glover
Would you like to continue registration, yes/no? y
Enter your State of Residency(eg. Texas = TX): TX
##Please verify state of residency(Format in (eg. Texas = TX)).##
Enter your State of Residency(eg. Texas = TX): TX
##Please verify state of residency(Format in (eg. Texas = TX)).##
Enter your State of Residency(eg. Texas = TX): TX
```

Fig. 12



