

```
1 # Exercise 1: (score : 1) Write a Python program to read a file and display its contents
2 # from random import sample
3 file1=open('C:\\Users\\user\\PycharmProjects\\entri_d41_python_project\\assignment.txt','r')
4 print(file1)
5 print(file1.read())
6
7 # Exercise 2: (score : 1) Write a Python program to copy the contents of one file to another file
8 source_filename = input("Enter the source file name:")
9 destination_filename = input("Enter the destination file name:")
10
11 try:
12     source_file = open(source_filename, 'r')
```

Run Assignment5

```
C:\Users\user\PycharmProjects\entri_d41_python_project\.venv\Scripts\python.exe C:\Users\user\PycharmProjects\entri_d41_pytho
<_io.TextIOWrapper name='C:\\Users\\user\\PycharmProjects\\entri_d41_python_project\\assignment.txt' mode='r' encoding='cp125
happy new year
Enter the source file name:assignment.txt
```

The image shows a PyCharm IDE window with a project named 'entri_d41_python_project'. The 'filehandling.py' file is open, displaying a Python script that copies the contents of a source file to a destination file. The script includes error handling for file not found and general exceptions. The 'Run' console at the bottom shows the execution output, indicating that the file 'assignment.txt' was successfully copied to 'sample.txt'.

```
8 source_filename = input("Enter the source file name:")
9 destination_filename = input("Enter the destination file name:")
10 try:
11     source_file = open(source_filename, 'r')
12     destination_file = open(destination_filename, 'w')
13     contents = source_file.read()
14     destination_file.write(contents)
15     source_file.close()
16     destination_file.close()
17     print(f"Contents of '{source_filename}' have been successfully copied to '{destination_filename}'.")
18 except FileNotFoundError:
19     print(f"Error: The file '{source_filename}' does not exist.")
20 except Exception as e:
21     print(f"An error occurred: {e}")
```

Run Assignment5 x

```
<_io.TextIOWrapper name='C:\\Users\\user\\PycharmProjects\\entri_d41_python_project\\assignment.txt' mode='r' encoding='cp1252'>
happy new year
Enter the source file name:assignment.txt
Enter the destination file name:sample.txt
Contents of 'assignment.txt' have been successfully copied to 'sample.txt'.
```

The image shows a Python IDE window with a dark theme. The top bar displays the project name 'entri_d41_python_project' and 'Version control'. The file explorer on the left shows several files: 'Session1.py', 'Tuple.py', 'functions.py', 'filehandling.py', 'Module.py', and 'Assignment5.py'. The main editor area shows the code for 'Assignment5.py'.

```
23 # Exercise 3: (score : 2) Write a Python program to read the content of a file and count the total
24 # number of words in that file.
25 file2=open("sample.txt",'r')
26 content=file2.read()
27 words=content.split()
28 word_count=len(words)
29 print('Content of the file: ',content)
30 print('Total words= ',len(content))
31
32
33 # Exercise 4: (score : 1) Write a Python program that prompts the user to input a string and
34 # converts it to an integer. Use try-except blocks to handle any exceptions that might occur
35 a=input("the string which is to be converted to int")
36 try:
```

Below the code editor is a 'Run' panel for 'Assignment5'. It shows the execution output:

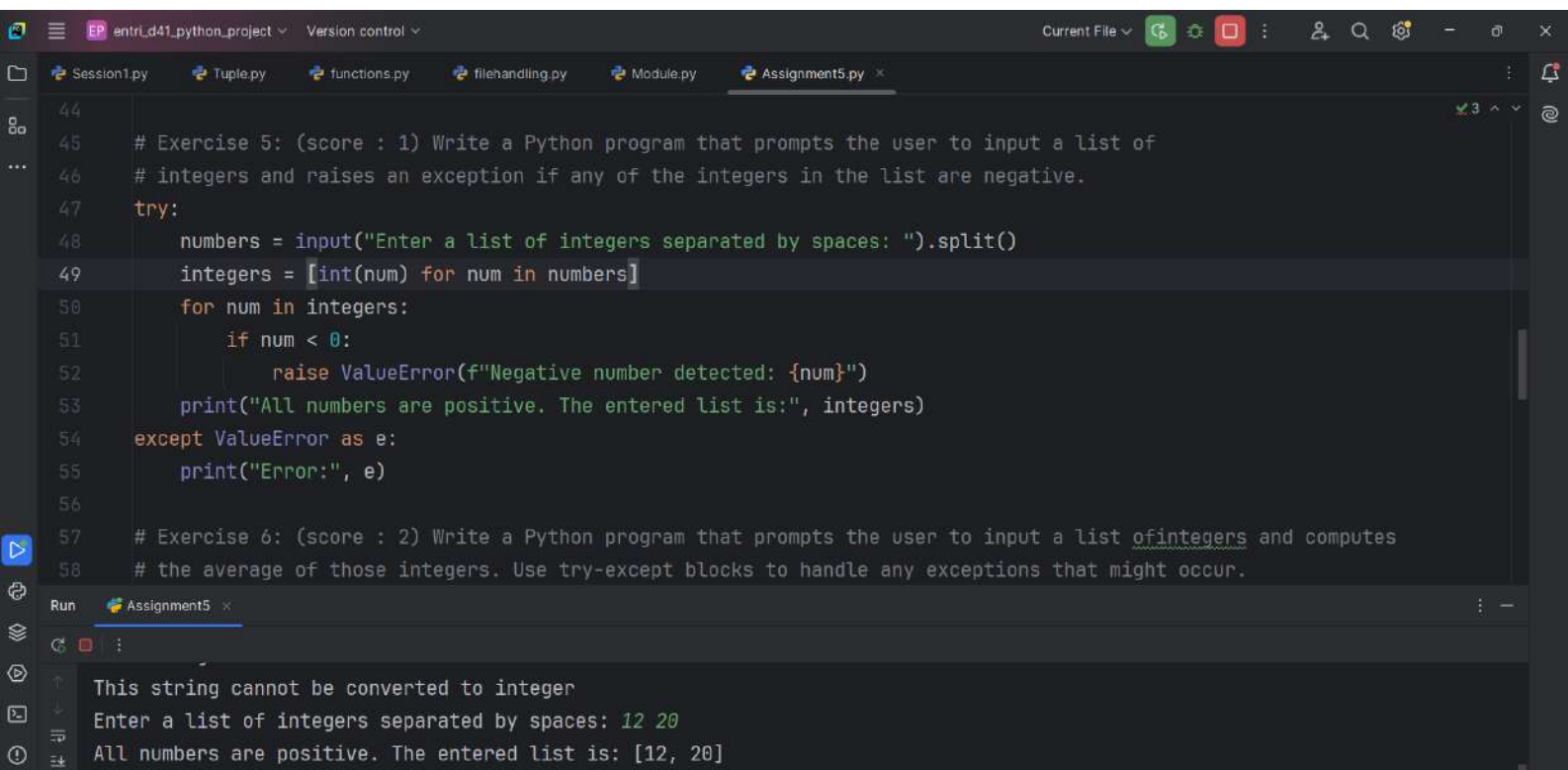
```
Enter the destination file name:sample.txt
Contents of 'assignment.txt' have been successfully copied to 'sample.txt'.
Content of the file: happy new year
Total words= 14
```

The image shows a code editor window with a dark theme. The top bar includes a menu icon, a project name 'entri_d41_python_project', a 'Version control' dropdown, and a 'Current File' dropdown. Below the top bar, there are tabs for 'Session1.py', 'Tuple.py', 'functions.py', 'filehandling.py', 'Module.py', and 'Assignment5.py'. The main editor area displays Python code for Exercise 4 and Exercise 5. Exercise 4 is a program that prompts the user to input a string and converts it to an integer, using try-except blocks to handle exceptions. Exercise 5 is a program that prompts the user to input a list of words and calculates the total number of words. The terminal output at the bottom shows the execution of the program, including the prompt 'the string which is to be converted to int', the input 'hi', and the error message 'This string cannot be converted to integer'.

```
32
33 # Exercise 4: (score : 1) Write a Python program that prompts the user to input a string and
34 # converts it to an integer. Use try-except blocks to handle any exceptions that might occur
35 a=input("the string which is to be converted to int")
36 try:
37     b=int(a)
38     print(b,"the string converted to integer")
39 except ValueError:
40     print("This string cannot be converted to integer")
41 except Exception as e:
42     print("This string cannot be converted to integer:",e)
43
44
45 # Exercise 5: (score : 1) Write a Python program that prompts the user to input a list of
```

Run Assignment5 x

Contents of 'assignment.txt' have been successfully copied to 'sample.txt'.
Content of the file: happy new year
Total words= 14
the string which is to be converted to int hi
This string cannot be converted to integer

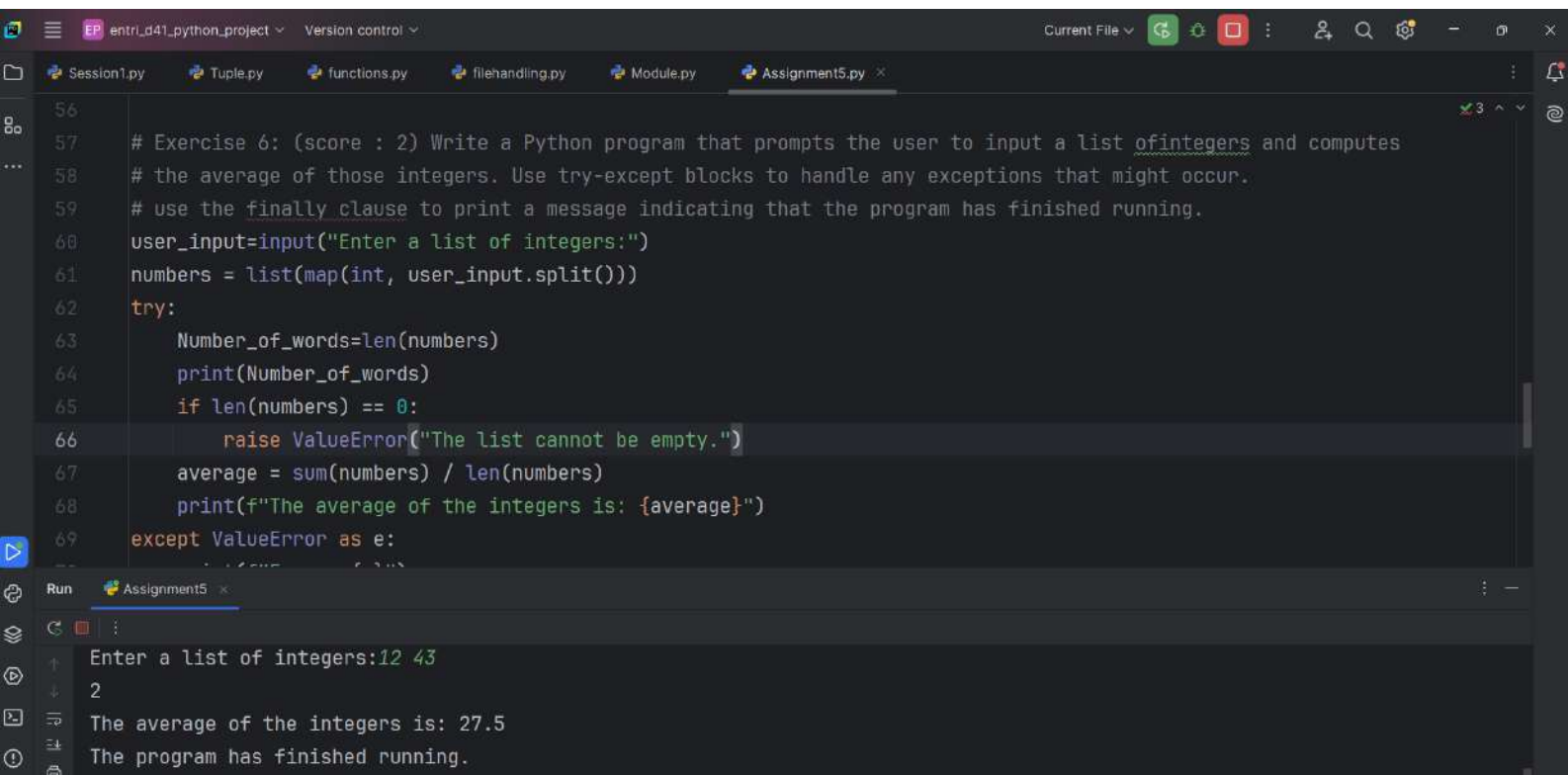


The screenshot shows a code editor with a dark theme. The top bar includes a file explorer on the left, a project name 'entri_d41_python_project' and 'Version control' dropdowns, and a 'Current File' dropdown. Below the top bar, a tab bar shows several files: 'Session1.py', 'Tuple.py', 'functions.py', 'filehandling.py', 'Module.py', and 'Assignment5.py'. The main editor area displays Python code for two exercises. Exercise 5 (lines 44-56) prompts the user for a list of integers and raises a ValueError if any are negative. Exercise 6 (lines 57-58) prompts the user for a list of integers and computes the average. The bottom panel, titled 'Run' and 'Assignment5', shows the terminal output of the program.

```
44
45 # Exercise 5: (score : 1) Write a Python program that prompts the user to input a list of
46 # integers and raises an exception if any of the integers in the list are negative.
47 try:
48     numbers = input("Enter a list of integers separated by spaces: ").split()
49     integers = [int(num) for num in numbers]
50     for num in integers:
51         if num < 0:
52             raise ValueError(f"Negative number detected: {num}")
53     print("All numbers are positive. The entered list is:", integers)
54 except ValueError as e:
55     print("Error:", e)
56
57 # Exercise 6: (score : 2) Write a Python program that prompts the user to input a list of integers and computes
58 # the average of those integers. Use try-except blocks to handle any exceptions that might occur.
```

Run Assignment5 x

This string cannot be converted to integer
Enter a list of integers separated by spaces: 12 20
All numbers are positive. The entered list is: [12, 20]



The screenshot displays a code editor window with a file explorer on the left and a terminal at the bottom. The code editor shows a Python script for Exercise 6, which prompts the user for a list of integers and calculates their average. The script uses a try-except block to handle potential errors. The terminal window shows the output of the program, including the user input, the number of integers, the calculated average, and a completion message.

```
56
57 # Exercise 6: (score : 2) Write a Python program that prompts the user to input a list of integers and computes
58 # the average of those integers. Use try-except blocks to handle any exceptions that might occur.
59 # use the finally clause to print a message indicating that the program has finished running.
60 user_input=input("Enter a list of integers:")
61 numbers = list(map(int, user_input.split()))
62 try:
63     Number_of_words=len(numbers)
64     print(Number_of_words)
65     if len(numbers) == 0:
66         raise ValueError("The list cannot be empty.")
67     average = sum(numbers) / len(numbers)
68     print(f"The average of the integers is: {average}")
69 except ValueError as e:
```

Run Assignment5

Enter a list of integers:12 43
2
The average of the integers is: 27.5
The program has finished running.

The screenshot shows a code editor with a dark theme. The top bar indicates the project is 'entri_d41_python_project' and the current file is 'Assignment5.py'. The editor contains the following Python code:

```
65 if len(numbers) == 0:
66     raise ValueError("The list cannot be empty.")
67 average = sum(numbers) / len(numbers)
68 print(f"The average of the integers is: {average}")
69 except ValueError as e:
70     print(f"Error: {e}")
71 except Exception as e:
72     print(f"An unexpected error occurred: {e}")
73
74 finally:
75     print("The program has finished running.")
76
77 # Exercise 7 : (score : 2) Write a Python program that prompts the user to input a filename
78 # and writes a string to that file. Use try-except blocks to handle any exceptions that might
```

Below the editor, the 'Run' console shows the output of the program:

```
Enter a list of integers:12 43
2
The average of the integers is: 27.5
The program has finished running.
```

The image shows a code editor window with a dark theme. The top bar displays the project name 'entri_d41_python_project' and 'Version control'. The file explorer on the left shows several files: 'Session1.py', 'Tuple.py', 'functions.py', 'filehandling.py', 'Module.py', and 'Assignment5.py'. The main editor area shows the code for 'Assignment5.py'.

```
77 # Exercise 7 : (score : 2) Write a Python program that prompts the user to input a filename
78 # and writes a string to that file. Use try-except blocks to handle any exceptions that might
79 # occur and print a welcome message if there is no exception occurred.
80 file_name=input("Enter the file name:")
81 new_string=input("enter a string to the file:")
82 try:
83     with open(file_name, "w") as file_name:
84         file_name.write(new_string)
85
86     print("File written successfully!", "welcome to the world of programming")
87 except Exception as e:
88     # Handle any exceptions and print an error message
89     print("An error occurred:", e)
```

Below the code editor is a 'Run' panel titled 'Assignment5'. It shows the execution output:

```
Enter the file name:sample.txt
enter a string to the file:Hello world!
File written successfully! welcome to the world of programming

Process finished with exit code 0
```

The bottom status bar indicates the file encoding is '66:54 CRLF UTF-8', the indentation is '4 spaces', and the Python version is 'Python 3.13 (entri_d41_python_project)'.