










PC

hello world ▾ Version control ▾

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Project ▾

hello world C:\Users\user\PycharmProjects\hello world

▸ venv library root

ex2.py

main.py

modules.py



External Libraries

Scratches and Consoles

ex2.py ×

```
1 import random
2
3 def random_number():
4     return random.randint(1,10)
5
6 result = random_number()
7 print(f"Random number in 1 to 10:{result}")
8
```

Run ex2 ×


  ⋮



"C:\Users\user\PycharmProjects\hello world\venv\Scripts\python.exe" "C:\Users\user\PycharmProjects\hello world\ex2.py"


Random number in 1 to 10:7





Process finished with exit code 0


hello world > ex2.py

CRLF UTF-8 4 spaces Python 3.11 (hello world) 

 Type here to search 



 26°C Cloudy   

6:16 PM  
7/5/2023 

PC

hello world

Version control

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🔍

⚙️

👤

🔍

⚙️

—

📄

✕

Project

hello world C:\Users\user\PycharmProjects\hello world

venv library root

ex2.py

ex3.py

main.py

modules.py

External Libraries

Scratches and Consoles

ex2.py

ex3.py

1 def upper\_case(text):

2 return text.upper()

3

4 text = "hello world!"

5 result =upper\_case(text)

6 print(f"uppercase is:{result}")

7

8

9

Run

ex3

🔄

⏏

⋮

"C:\Users\user\PycharmProjects\hello world\venv\Scripts\python.exe" "C:\Users\user\PycharmProjects\hello world\ex3.py"

uppercase is:HELLO WORLD!

Process finished with exit code 0

hello world

ex3.py

9:1

CRLF

UTF-8

4 spaces

Python 3.11 (hello world)

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🔍 Type here to search

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🌤️ 26°C Cloudy

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
🕒 6:27 PM

📅 7/5/2023

🔔 2

PC

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Project ▾

hello world C:\Users\user\PycharmProjects\hello world

▸ venv library root

ex2.py

ex3.py

ex4.py



main.py

modules.py

▸ External Libraries

Scratches and Consoles

Run ex4 ×

  ⋮

"C:\Users\user\PycharmProjects\hello world\venv\Scripts\python.exe" "C:\Users\user\PycharmProjects\hello world\ex4.py"

The factorial of 5 is: 120

Process finished with exit code 0

ex2.py ex3.py ex4.py ×

1 import math

2

3 def factorial(number):

4 return math.factorial(number)

5


6 number = 5




7 result= factorial(number)




8 print(f"The factorial of {number} is: {result}")

4 ^ ▾

hello world > ex4.py

CRLF UTF-8 4 spaces Python 3.11 (hello world) 

 Type here to search  

 26°C Cloudy  6:32 PM 7/5/2023 

PC

hello world

Version control

main

Python 3.11 (hello world)

12:51 AM 7/6/2023

Project

hello world C:\Users\user\PycharmProjects\hello world

venv library root

calculator.py

employee.py

ex2.py

ex3.py

ex4.py

file\_operations.py

greeting.py

main.py

math\_operations.py

modules.py

External Libraries

Scratches and Consoles

calculator.py

main.py

Run

main

"C:\Users\user\PycharmProjects\hello world\venv\Scripts\python.exe" "C:\Users\user\PycharmProjects\hello world\main.py"

Addition :14

subtract :6

multiplication : 40

Division : 2.5

Process finished with exit code 0

hello world

main.py

CRLF UTF-8 4 spaces Python 3.11 (hello world)

calculator.py

5 def subtract(x, y):

6 return x - y

9 def multiply(x, y):

10 return x \* y

13 def divide(x, y):

14 return x / y

15

16

17

18

subtract()

main.py

1 import calculator

2

3 x = 10

4 y = 4

5 add\_result = calculator.add(x, y)

6 print(f"Addition :{add\_result}")

7 sub\_result = calculator.subtract(x,y)

8 print(f"subtract :{sub\_result}")

9 mul\_result = calculator.multiply(x, y)

10 print(f"multiplication : {mul\_result}")

11 div\_result = calculator.divide(x, y)

12 print(f"Division : {div\_result}")

13

PC

hello world Version control

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Python icons

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Project

hello world C:\Users\user\PycharmProjects\hel

venv library root

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ex2.py

ex3.py

ex4.py

greeting.py

main.py

modules.py

External Libraries

Scratches and Consoles

greeting.py

main.py

1 def greet\_english():

2 return "Hello!"

3

4 def greet\_spanish():

5 return "¡Hola!"

6

7 def greet\_french():

8 return "Bonjour!"

9

1 import greeting

2 print("English:", greeting.greet\_english())

3 print("Spanish:", greeting.greet\_spanish())

4 print("French:", greeting.greet\_french())

5

Run main

"C:\Users\user\PycharmProjects\hello world\venv\Scripts\python.exe" "C:\Users\user\PycharmProjects\hello world\main.py"

English: Hello!

Spanish: ¡Hola!

French: Bonjour!

Process finished with exit code 0

hello world main.py

CRLF UTF-8 4 spaces Python 3.11 (hello world)

Windows taskbar



PC

hello world Version control

Project

hello world C:\Users\user\PycharmProjects\hel

venv library root

calculator.py

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ex3.py

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External Libraries

Scratches and Consoles

employee.py

1

2 class Employee:

3 def \_\_init\_\_(self, name, salary):

4 self.name = name

5 self.salary = salary

6

7 def get\_name(self):

8 return self.name

9

10 def get\_salary(self):

11 return self.salary

12

main.py

1 import employee

2

3 emp = employee.Employee("Arun nilakandan", 15000)

4

5 print("Name:", emp.get\_name())

6 print("Salary:", emp.get\_salary())

7

Run main

"C:\Users\user\PycharmProjects\hello world\venv\Scripts\python.exe" "C:\Users\user\PycharmProjects\hello world\main.py"

Name: Arun nilakandan

Salary: 15000

Process finished with exit code 0

hello world > main.py

2:1 CRLF UTF-8 4 spaces Python 3.11 (hello world)

Type here to search

26°C Cloudy

9:20 PM 7/5/2023

PC hello world Version control

Project

- hello world C:\Users\user\PycharmProjects\hello world
  - venv library root
  - calculator.py
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  - ex3.py
  - ex4.py
  - greeting.py
  - main.py
  - math\_operations.py
  - modules.py
- External Libraries
- Scratches and Consoles

math\_operations.py

```
1
2
3 import math
4
5 def calculate_circle_area(radius):
6     return math.pi * radius ** 2
7
8 def calculate_rectangle_area(length, width):
9     return length * width
10
11 def calculate_triangle_area(base, height):
12     return 0.5 * base * height
13
```

main.py

```
1
2 import math_operations
3
4 radius = 5
5 print("Circle area:", math_operations.calculate_circle_area(radius))
6
7 length = 4
8 width = 6
9 print("Rectangle area:", math_operations.calculate_rectangle_area(length, width))
10
11 base = 3
12 height = 8
13 print("Triangle area:", math_operations.calculate_triangle_area(base, height))
14
```

Run main

```
"C:\Users\user\PycharmProjects\hello world\venv\Scripts\python.exe" "C:\Users\user\PycharmProjects\hello world\main.py"
Circle area: 78.53981633974483
Rectangle area: 24
Triangle area: 12.0
Process finished with exit code 0
```

hello world > main.py

CRLF UTF-8 4 spaces Python 3.11 (hello world)

25°C Mostly cloudy 10:39 PM 7/5/2023



PC hello world Version control

Project

- hello world C:\Users\user\PycharmProjects\hello world
  - venv library root
    - calculator.py
    - employee.py
    - ex2.py
    - ex3.py
    - ex4.py
    - file\_operations.py
    - greeting.py
    - main.py
    - math\_operations.py
    - modules.py
    - temperature\_conversion.py
  - External Libraries

temperature\_conversion.py

```
1 def celsius_to_fahrenheit(celsius):  
2     return (celsius * 9/5) + 32  
3  
4 def fahrenheit_to_celsius(fahrenheit):  
5     return (fahrenheit - 32) * 5/9  
6
```

main.py

```
1 import temperature_conversion  
2  
3 celsius_temperature = 25  
4 fahrenheit_temperature = 77  
5  
6 conversion_fahrenheit = temperature_conversion.celsius_to_fahrenheit(celsius_temperature)  
7 print(f"{celsius_temperature}C is equal to {conversion_fahrenheit}F")  
8 conversion_celsius = temperature_conversion.fahrenheit_to_celsius(fahrenheit_temperature)  
9 print(f"{fahrenheit_temperature}F is equal to {conversion_celsius}C")
```

Debug main

Threads & Variables Console

```
"C:\Users\user\PycharmProjects\hello world\venv\Scripts\python.exe" "C:/Program Files/JetBrains/PyCharm Community Edition 2023.1.3/plugins/python-ce/helper.py"  
Connected to pydev debugger (build 231.9161.41)  
25C is equal to 77.0F  
77F is equal to 25.0C  
  
Process finished with exit code 0
```

hello world > temperature\_conversion.py 6:1 CRLF UTF-8 4 spaces Python 3.11 (hello world)

Type here to search




INR/USD +0.20%







6:02 PM 7/9/2023



PC

hello world ▾ Version control ▾

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Project ▾

hello world C:\Users\user\PycharmProjects\hello world

venv library root

calculator.py

employee.py

ex2.py

ex3.py

ex4.py

exe 11.py

exe 12.py

file\_operations.py

greeting.py

main.py

math\_operations.py




modules.py

temperature\_conversion.py

exe 12.py x

```
1 import re
2
3 date = "14/07/2023"
4
5 pattern = r'\d{2}/\d{2}/\d{4}'
6
7 if re.match(pattern, date):
8     print("Valid date.")
9 else:
10     print("Invalid date.")
11
```

Run exe 12 x

"C:\Users\user\PycharmProjects\hello world\venv\Scripts\python.exe" "C:\Users\user\PycharmProjects\hello world\exe 12.py"


Valid date.

Process finished with exit code 0

hello world > exe 12.py

8:25 CRLF UTF-8 4 spaces Python 3.11 (hello world)

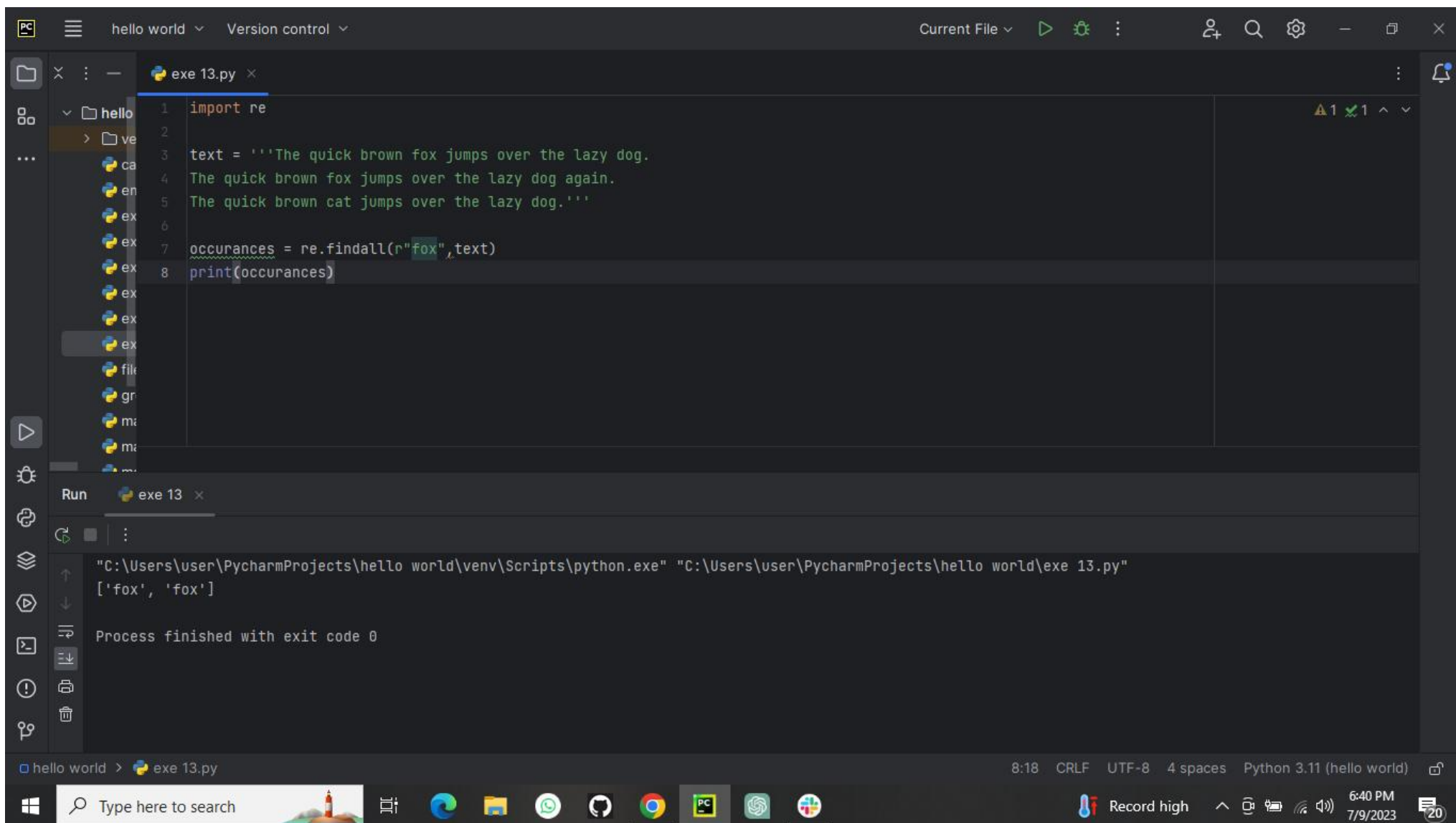
Type here to search



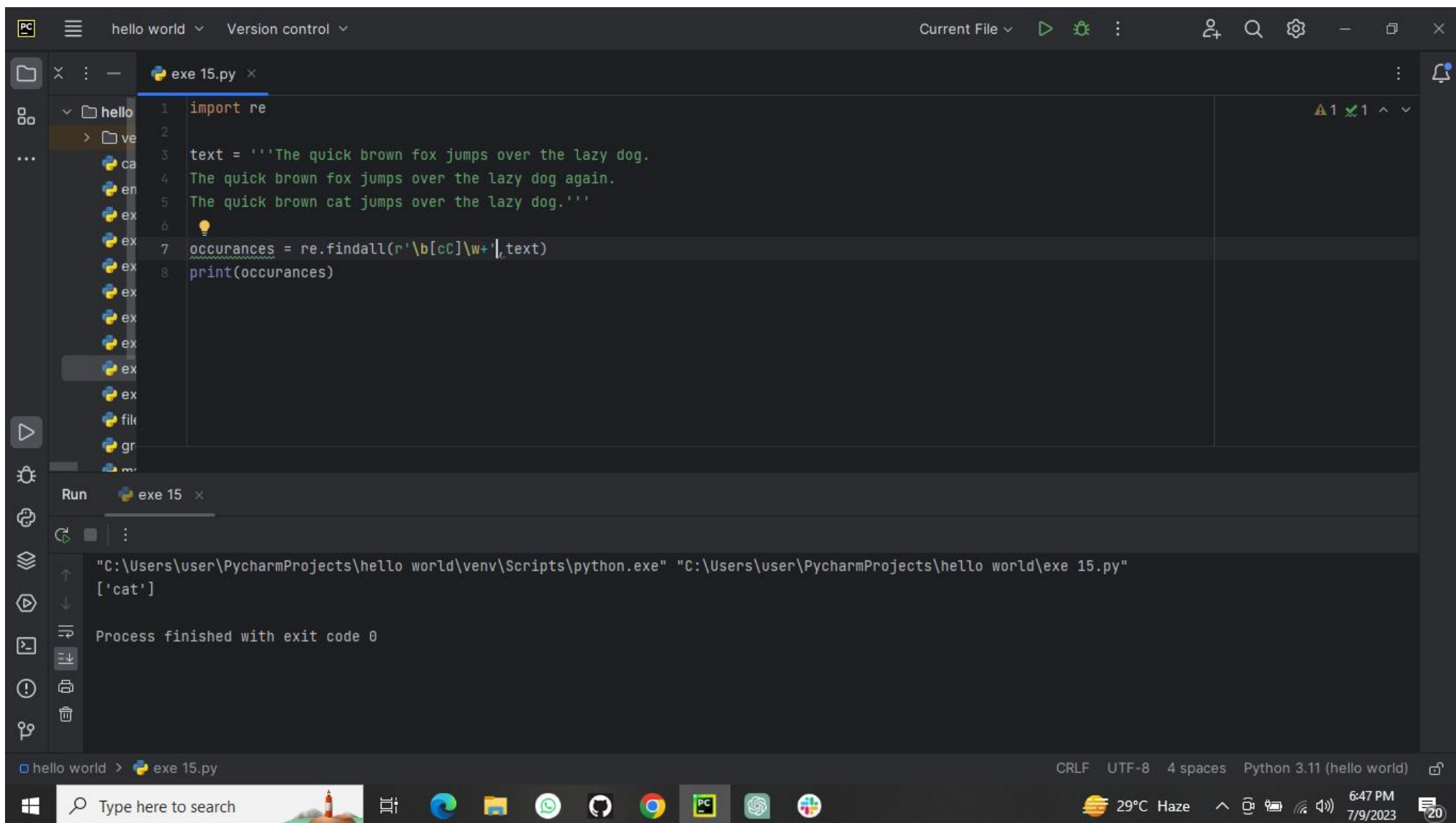
29°C Partly sunny

6:30 PM 7/9/2023

20

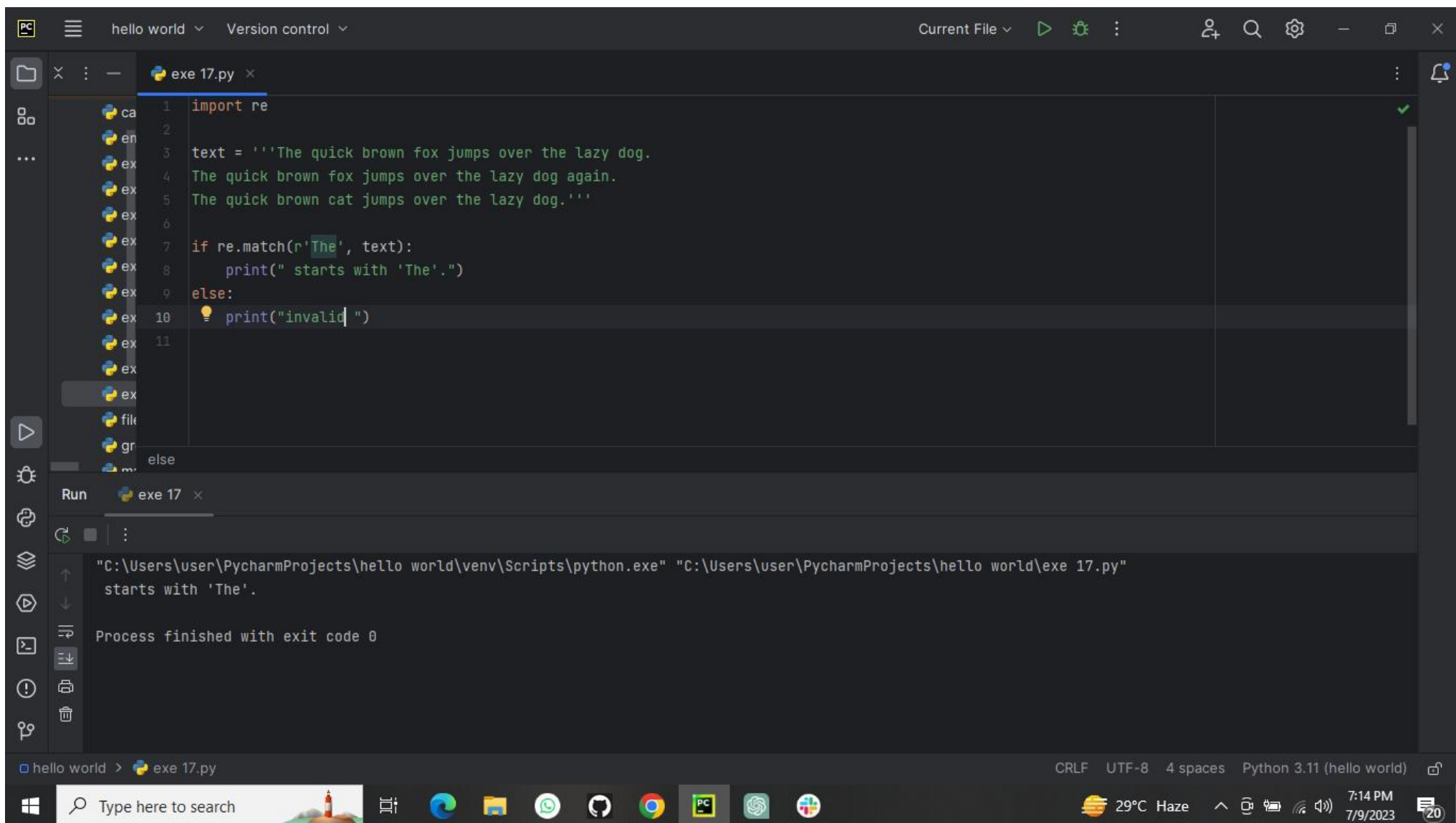









































PC

hello world ▾ Version control ▾



Current File ▾   ⋮    -  

exe 18.py ×

 en 1 import re  
 ex 2  
 ex 3 text = '''The quick brown fox jumps over the lazy dog.  
 ex 4 The quick brown fox jumps over the lazy dog again.  
 ex 5 The quick brown cat jumps over the lazy dog.'''  
 ex 6  
 ex 7 pattern = r'fox'  
 ex 8 match = re.search(pattern, text)  
 ex 9  
 ex 10 if match:  
 ex 11  print("First occurrence of 'fox' found at index:", match.group())  
 ex 12 else:  
 ex 13 print("No occurrence of 'fox' found.")  
 ex 14  
 file  
 gr  
 m: if match

Run exe 18 ×

  ⋮

"C:\Users\user\PycharmProjects\hello world\venv\Scripts\python.exe" "C:\Users\user\PycharmProjects\hello world\exe 18.py"  
First occurrence of 'fox' found at index: fox  
  
Process finished with exit code 0

hello world > exe 18.py

Windows taskbar

Search: Type here to search

Taskbar icons: File Explorer, Edge, WhatsApp, GitHub, Chrome, PyCharm, VS Code, etc.

System tray: 29°C Haze, 7:17 PM 7/9/2023, 20 notifications

