

Assignment_03

Edit
View
Tool

Conditional and Looping Statements



Exercise 1

Input 12

```
12 if 1 <= month <= 12:
13     print(f"Month {month} is {months[month - 1]}")
14 else: print("Invalid month. Please enter a number between 1 and 12.")
```

Run MonthNames x

Enter the month (1-12): 12

Month 12 is December

Process finished with exit code 0

Input 16

```
11 if 1 <= month <= 12:
12     print(f"Month {month} is {months[month - 1]}")
13 else: print("Invalid month. Please enter a number between 1 and 12.")
14 #-----
```

Run MonthNames x

Enter the month (1-12): 16

Invalid month. Please enter a number between 1 and 12.

Process finished with exit code 0

Exercise 2

```
20 if age < 16:
21     price = 6 * 0.5
22 elif age >= 60:
23     price = 6 / 3
24 else: price = 6
25 print(f"Your ticket costs £{price:.2f}")
```

Run MonthNames x

C:\Users\pc\PycharmProjects\Assignments_python_project
Enter your age: 15
Your ticket costs £3.00

Process finished with exit code 0

Input Age= 15

```
20 if age < 16:
21     price = 6 * 0.5
22 elif age >= 60:
23     price = 6 / 3
24 else: price = 6
25 print(f"Your ticket costs £{price:.2f}")
```

Run MonthNames x

C:\Users\pc\PycharmProjects\Assignments_python_pro
Enter your age: 34
Your ticket costs £6.00

Process finished with exit code 0

Input Age= 34

```
20 if age < 16:
21     price = 6 * 0.5
22 elif age >= 60:
23     price = 6 / 3
24 else: price = 6
25 print(f"Your ticket costs £{price:.2f}")
26
```

Run MonthNames x

C:\Users\pc\PycharmProjects\Assignments_python_pr
Enter your age: 60
Your ticket costs £2.00

Process finished with exit code 0

Input Age = 60

Exercise 3

Output=Underweight

```
Run MonthNames x
C:\Users\pc\PycharmProjects\Assignments_python_project\
Enter your weight in (kg): 50
Enter your height in (m): 1.65
Your BMI is: 18.37
You are in the "underweight" range.

Process finished with exit code 0
```

Output=Normal

```
49 print(f"You are in the \"{status}\" range.")
Run MonthNames x
C:\Users\pc\PycharmProjects\Assignments_python_project\.venv\S
Enter your weight in (kg): 60
Enter your height in (m): 1.65
Your BMI is: 22.04
You are in the "normal" range.

Process finished with exit code 0
```


Exercise 3

Output=Overweight

```
status = "obese"

print(f"Your BMI is: {bmi:.2f}")
print(f"You are in the \"{status}\" range.")

MonthNames

C:\Users\pc\PycharmProjects\Assignments_python_proje
Enter your weight in (kg): 75
Enter your height in (m): 1.65
Your BMI is: 27.55
You are in the "overweight" range.

Process finished with exit code 0
```

Output=Obese

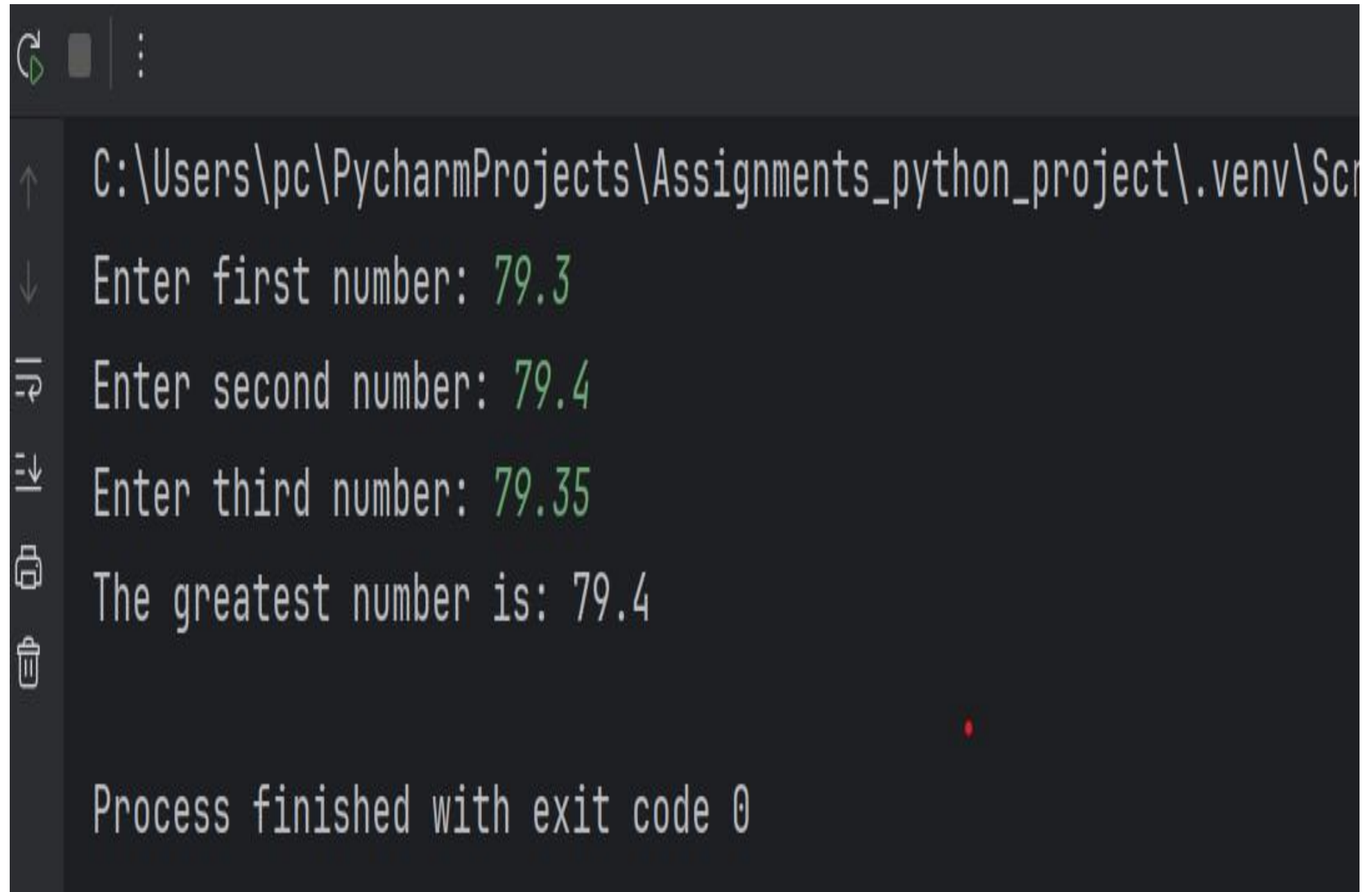
```
49 print(f"You are in the \"{status}\" range.")

Run MonthNames

C:\Users\pc\PycharmProjects\Assignments_python
Enter your weight in (kg): 95
Enter your height in (m): 1.60
Your BMI is: 37.11
You are in the "obese" range.

Process finished with exit code 0
```

Exercise 4

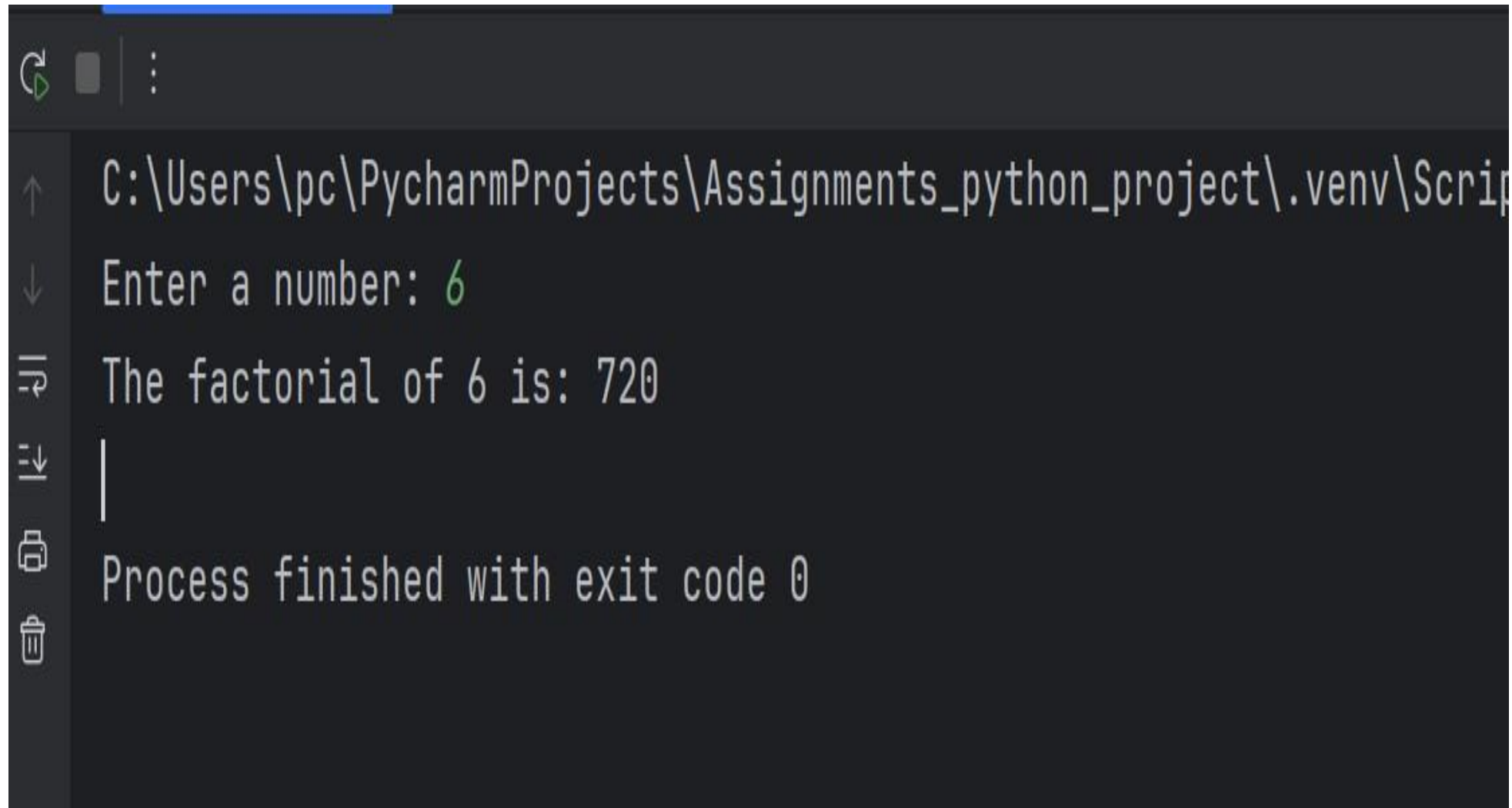


```
C:\Users\pc\PycharmProjects\Assignments_python_project\.venv\Scr
Enter first number: 79.3
Enter second number: 79.4
Enter third number: 79.35
The greatest number is: 79.4

Process finished with exit code 0
```

The screenshot shows a PyCharm terminal window with a dark theme. The terminal displays the execution of a Python script. The prompt shows the current directory as `C:\Users\pc\PycharmProjects\Assignments_python_project\.venv\Scr`. The user is prompted to enter three numbers: 79.3, 79.4, and 79.35. The script then outputs "The greatest number is: 79.4". At the bottom, it states "Process finished with exit code 0". On the left side of the terminal, there is a vertical toolbar with icons for running, stepping through code, and other debugging actions.

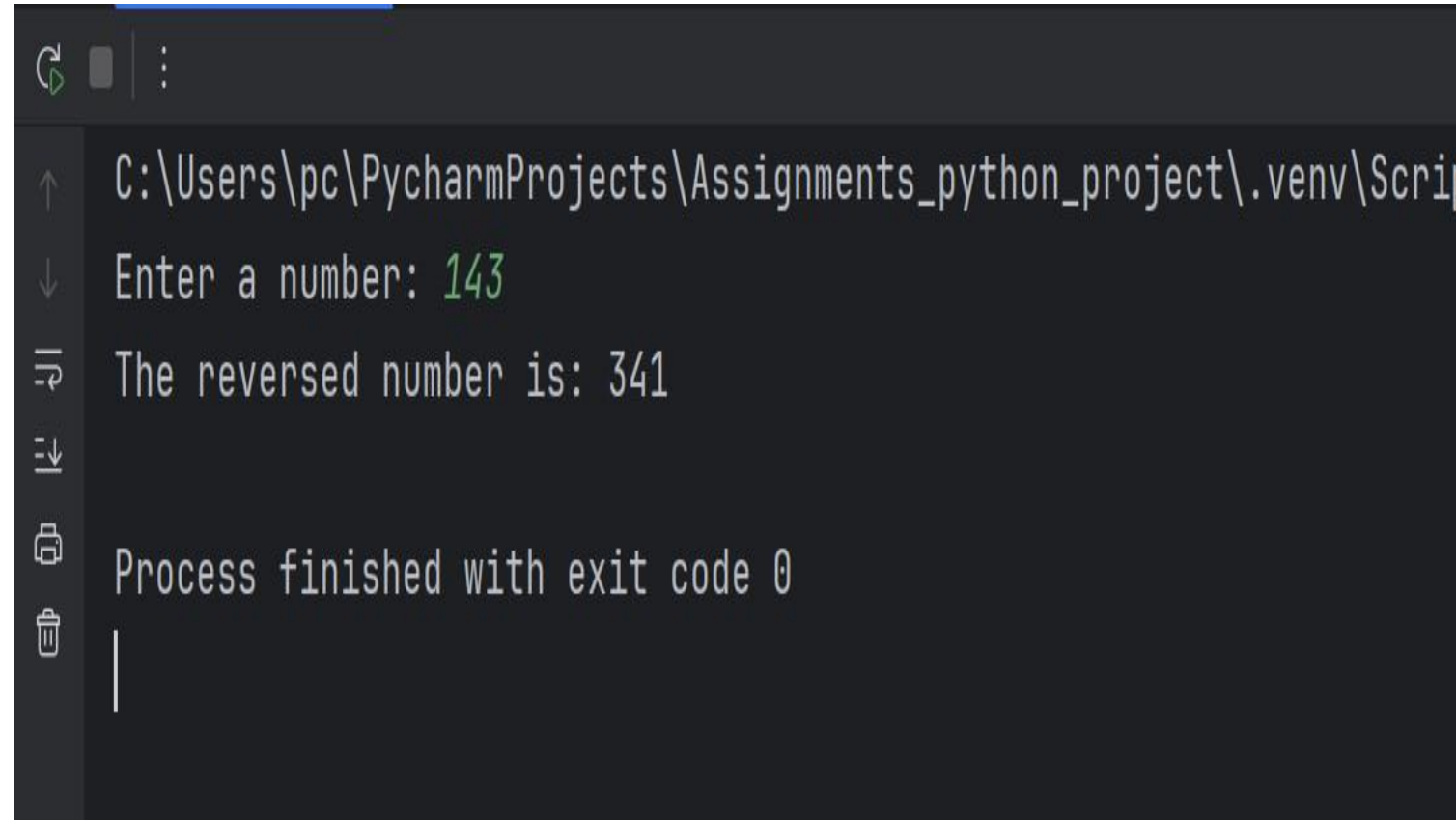
Exercise 5



```
C:\Users\pc\PycharmProjects\Assignments_python_project\.venv\Scripts
Enter a number: 6
The factorial of 6 is: 720
|
Process finished with exit code 0
```


$$6! = 6 * 5 * 4 * 3 * 2 * 1$$

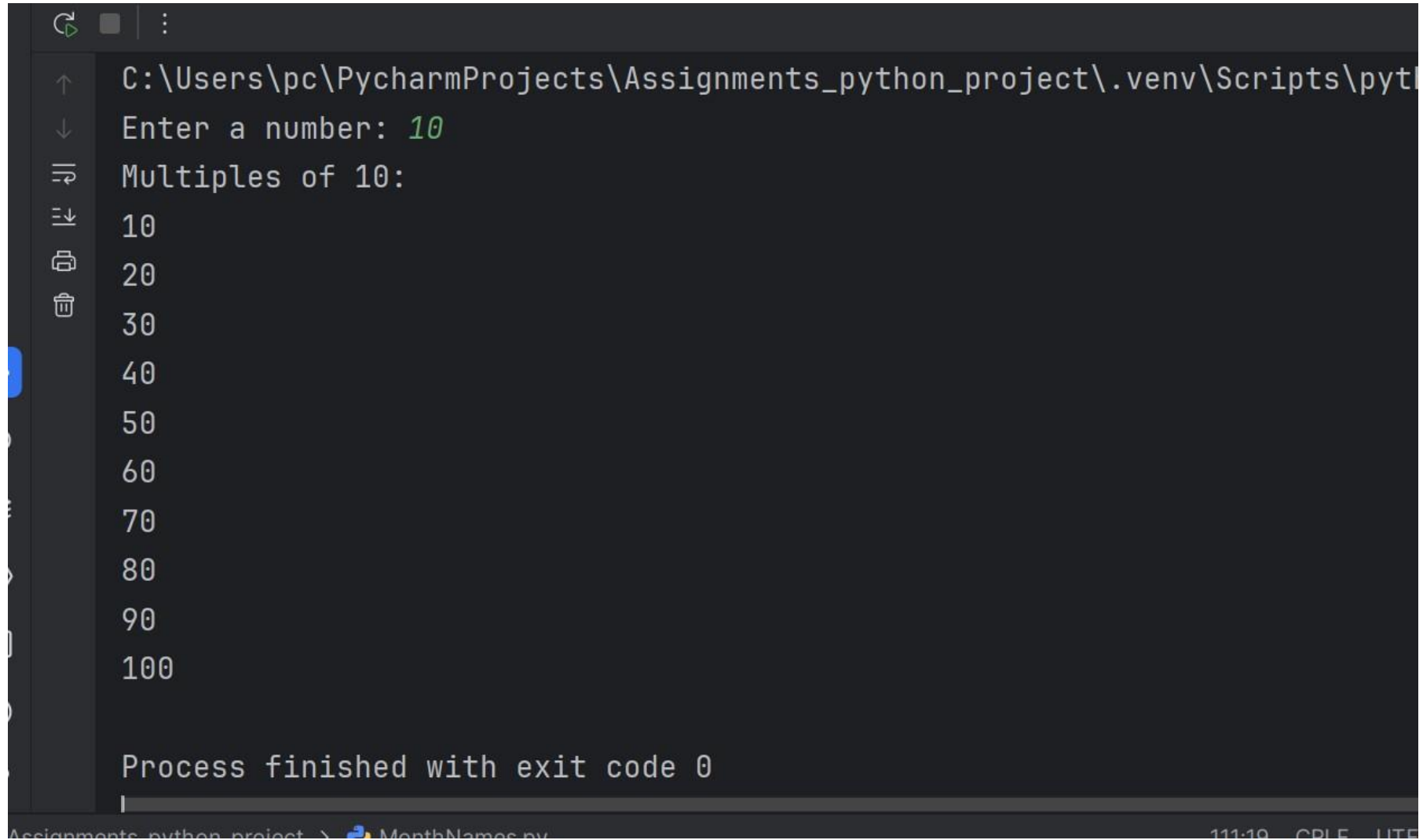
Exercise 6



```
C:\Users\pc\PycharmProjects\Assignments_python_project\.venv\Scripts>python script.py
Enter a number: 143
The reversed number is: 341
Process finished with exit code 0
```

Reversed number

Exercise 7

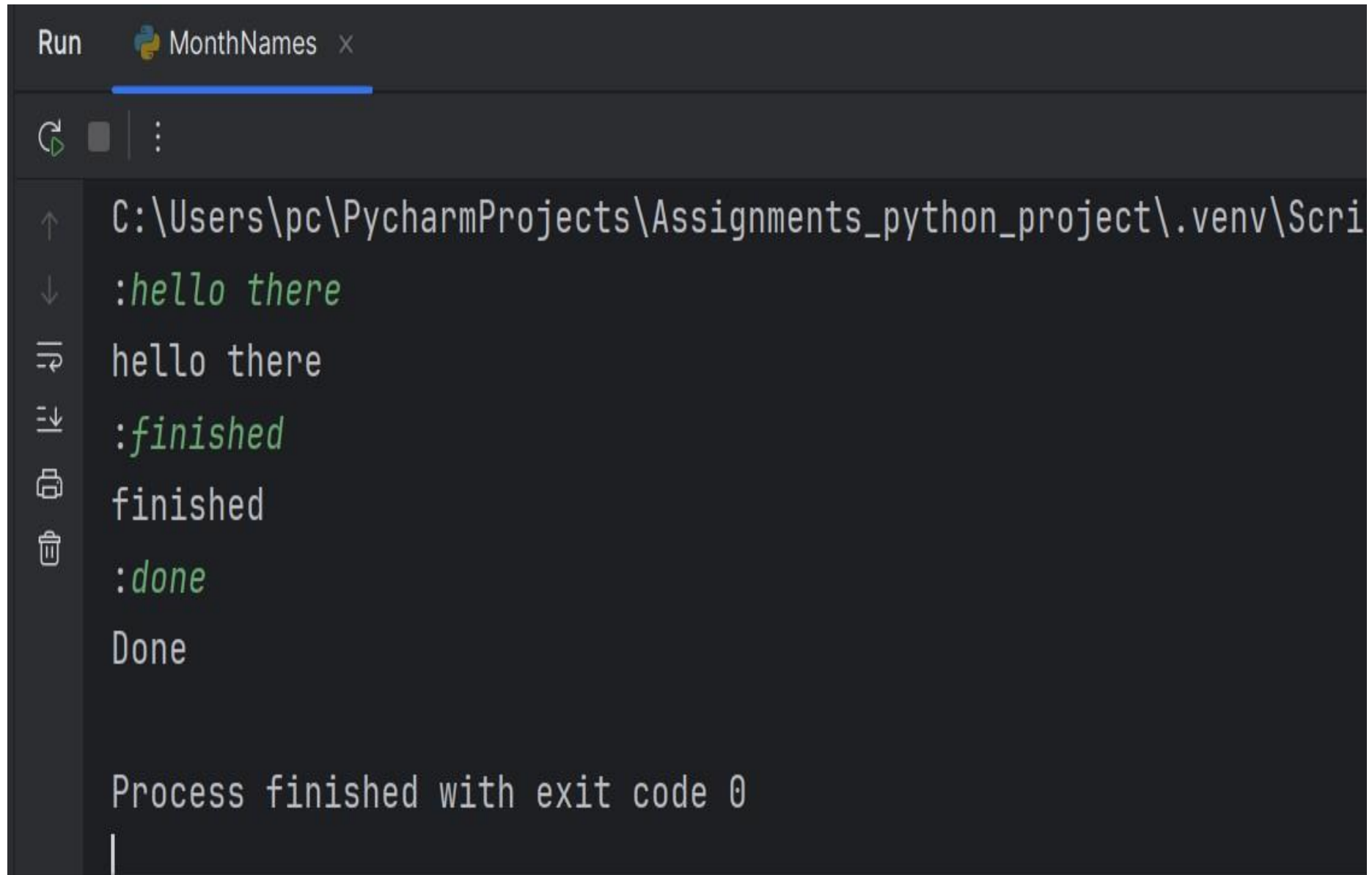


```
C:\Users\pc\PycharmProjects\Assignments_python_project\.venv\Scripts\python.exe
Enter a number: 10
Multiples of 10:
10
20
30
40
50
60
70
80
90
100

Process finished with exit code 0
```

Assignments_python_project > MonthNames.py 111:19 CRLF UTF8

Exercise 8



The screenshot shows a PyCharm Run console window for a script named 'MonthNames'. The console output is as follows:

```
C:\Users\pc\PycharmProjects\Assignments_python_project\.venv\Script\MonthNames.py:1:hello there
hello there
MonthNames.py:2:finished
finished
MonthNames.py:3:done
Done

Process finished with exit code 0
```

The output lines are color-coded: the first and third lines are green, while the others are white. On the left side of the console, there is a vertical toolbar with icons for navigating through the output (up, down, first, last, search, and clear).

Exercise 9

```
141 print(i)
```

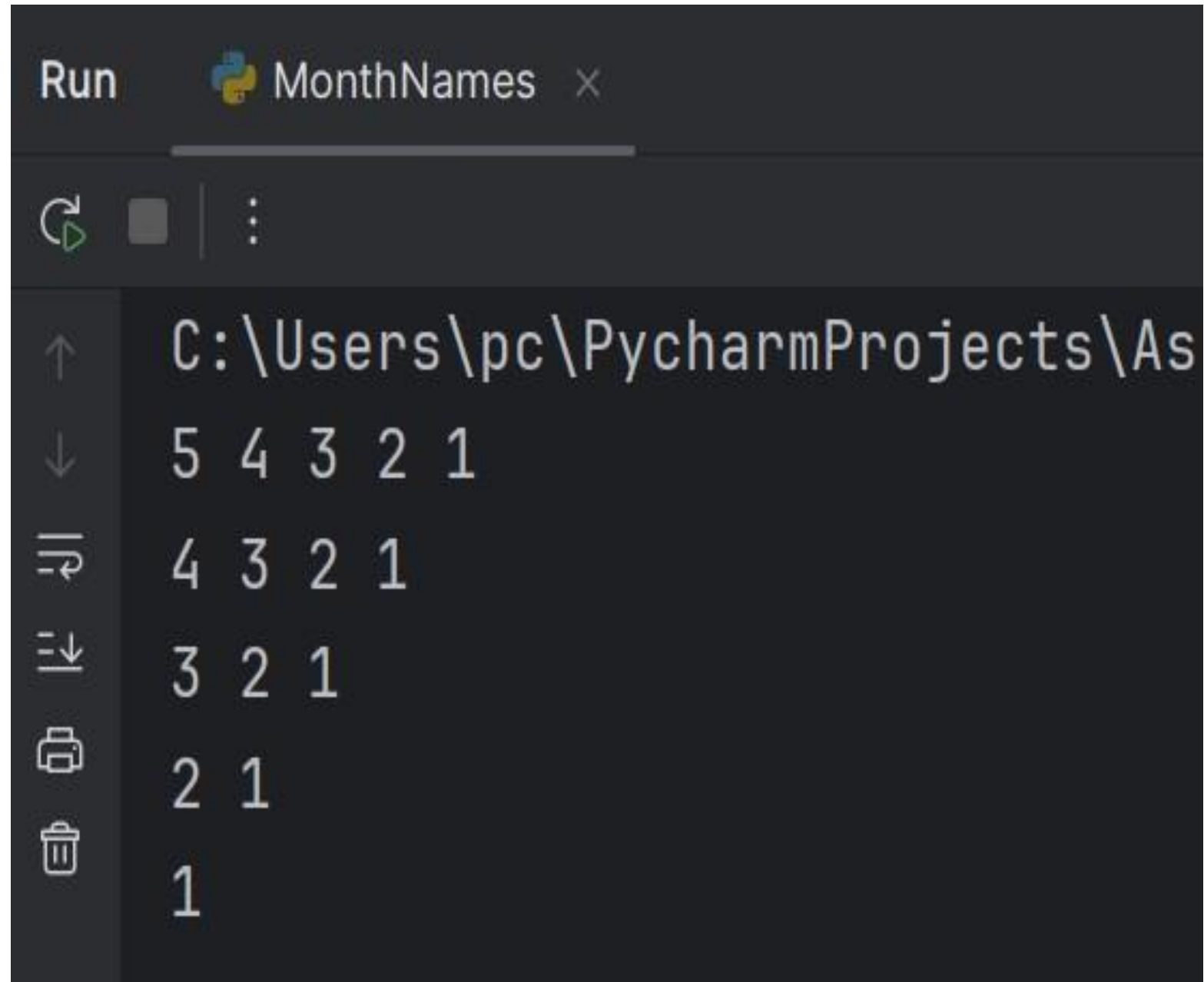
Run MonthNames x

C:\Users\pc\PycharmProjects\Assignments_python_proj

1
2
Fizz
4
Buzz
Fizz
7
8
Fizz
Buzz

Process finished with exit code 0

Exercise 10



The screenshot shows a PyCharm Run console window titled "Run" with a Python icon and a tab labeled "MonthNames". The console output displays a recursive function for printing month names. The path shown is "C:\Users\pc\PycharmProjects\As". The output consists of five lines of numbers, each representing a month name in reverse order (from 5 down to 1). The numbers are displayed in a light gray font on a dark background. On the left side of the console, there is a vertical toolbar with icons for navigating through the output (up, down, first, last, search, and delete).

```
C:\Users\pc\PycharmProjects\As
5 4 3 2 1
4 3 2 1
3 2 1
2 1
1
```