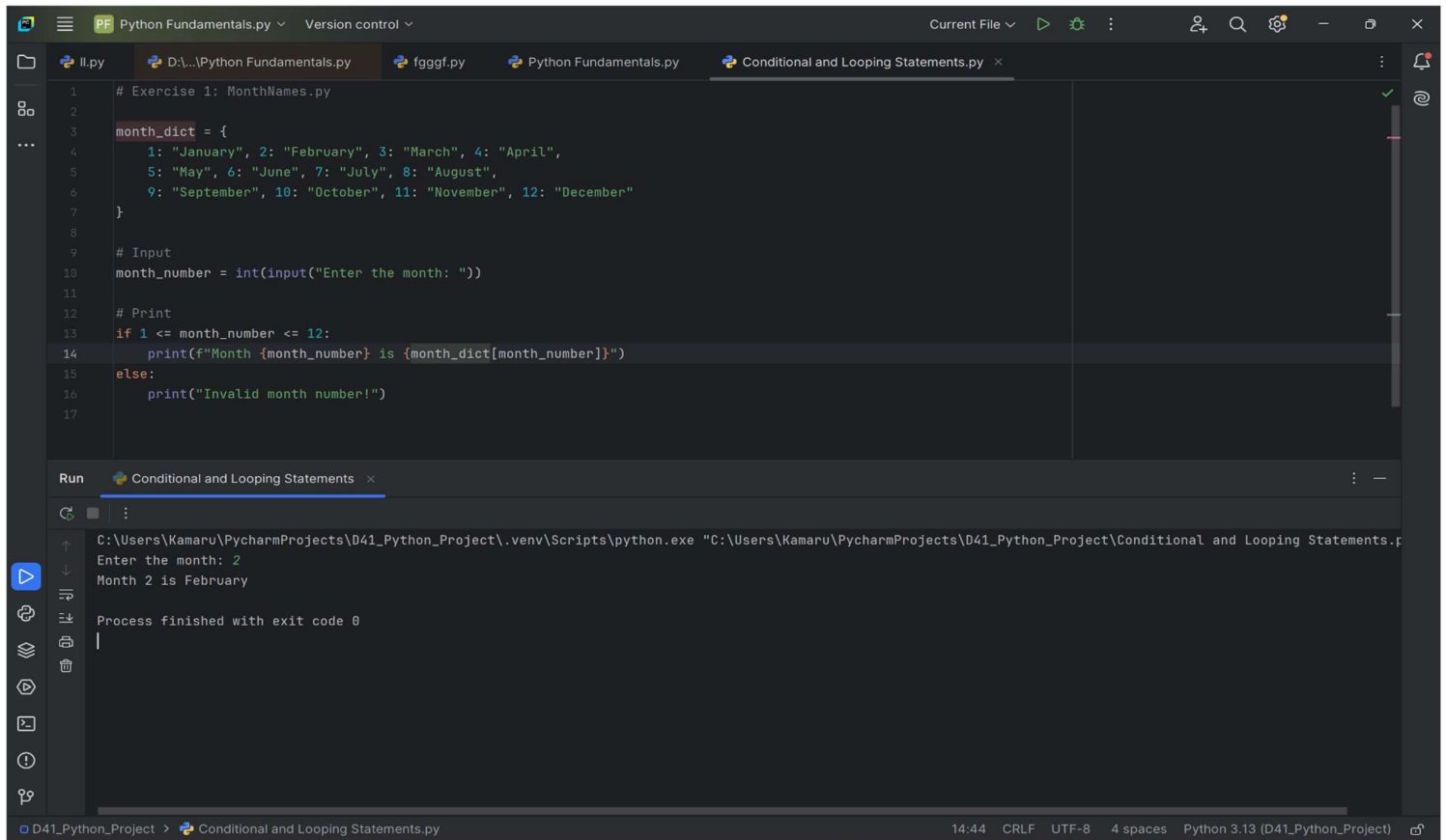


1.MONTH NAMES



The screenshot shows the PyCharm IDE with a Python script named 'Conditional and Looping Statements.py'. The script defines a dictionary 'month_dict' with month names as values for numbers 1-12. It prompts the user to 'Enter the month: ', takes input '2', and prints 'Month 2 is February'. The Run window shows the execution path and the output.

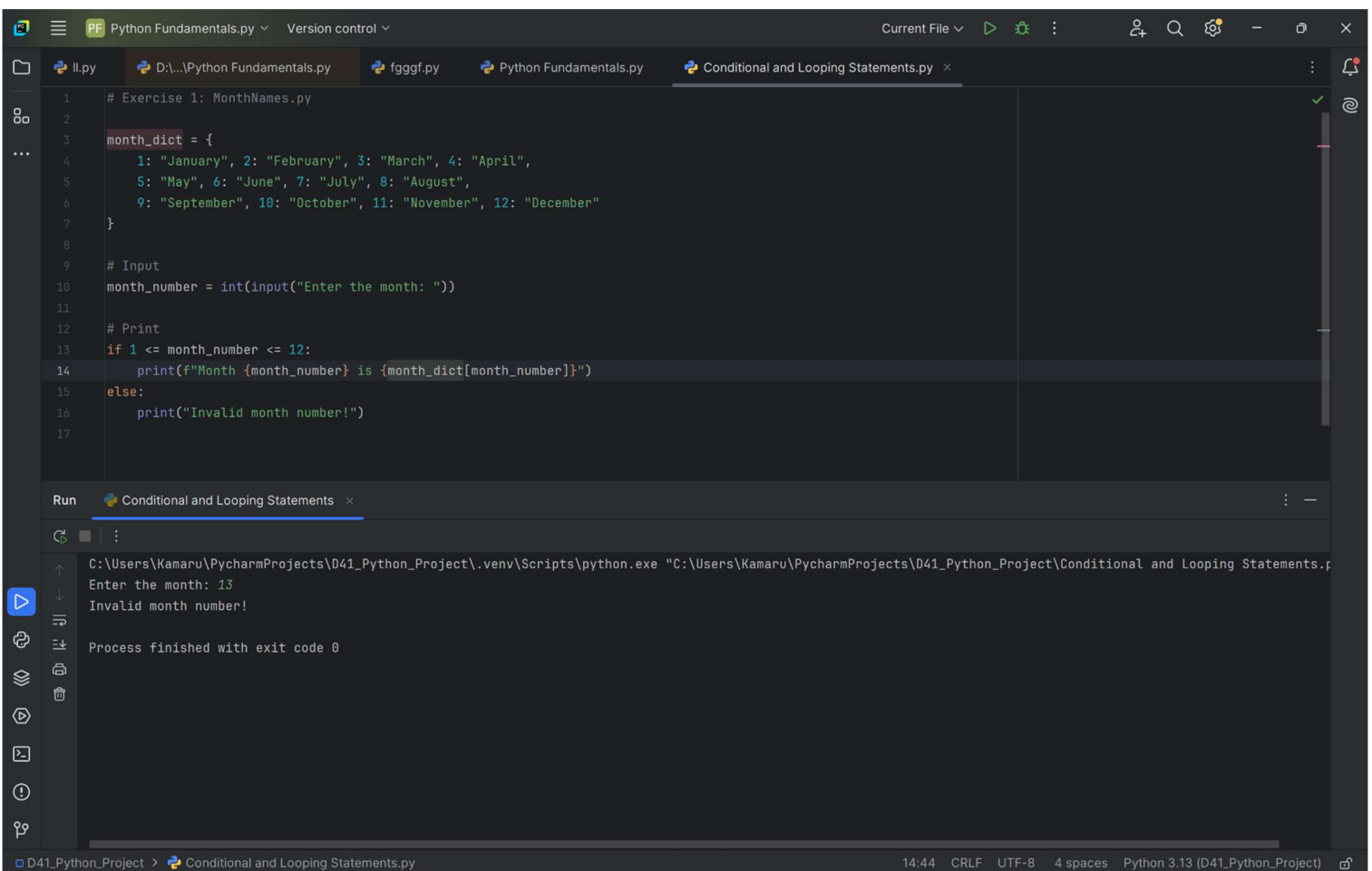
```
1 # Exercise 1: MonthNames.py
2
3 month_dict = {
4     1: "January", 2: "February", 3: "March", 4: "April",
5     5: "May", 6: "June", 7: "July", 8: "August",
6     9: "September", 10: "October", 11: "November", 12: "December"
7 }
8
9 # Input
10 month_number = int(input("Enter the month: "))
11
12 # Print
13 if 1 <= month_number <= 12:
14     print(f"Month {month_number} is {month_dict[month_number]}")
15 else:
16     print("Invalid month number!")
17
```

Run: Conditional and Looping Statements

C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.py"

Enter the month: 2
Month 2 is February

Process finished with exit code 0



This screenshot shows the same script being executed with the input '13'. Since 13 is outside the range of 1-12, the program prints 'Invalid month number!'.

```
1 # Exercise 1: MonthNames.py
2
3 month_dict = {
4     1: "January", 2: "February", 3: "March", 4: "April",
5     5: "May", 6: "June", 7: "July", 8: "August",
6     9: "September", 10: "October", 11: "November", 12: "December"
7 }
8
9 # Input
10 month_number = int(input("Enter the month: "))
11
12 # Print
13 if 1 <= month_number <= 12:
14     print(f"Month {month_number} is {month_dict[month_number]}")
15 else:
16     print("Invalid month number!")
17
```

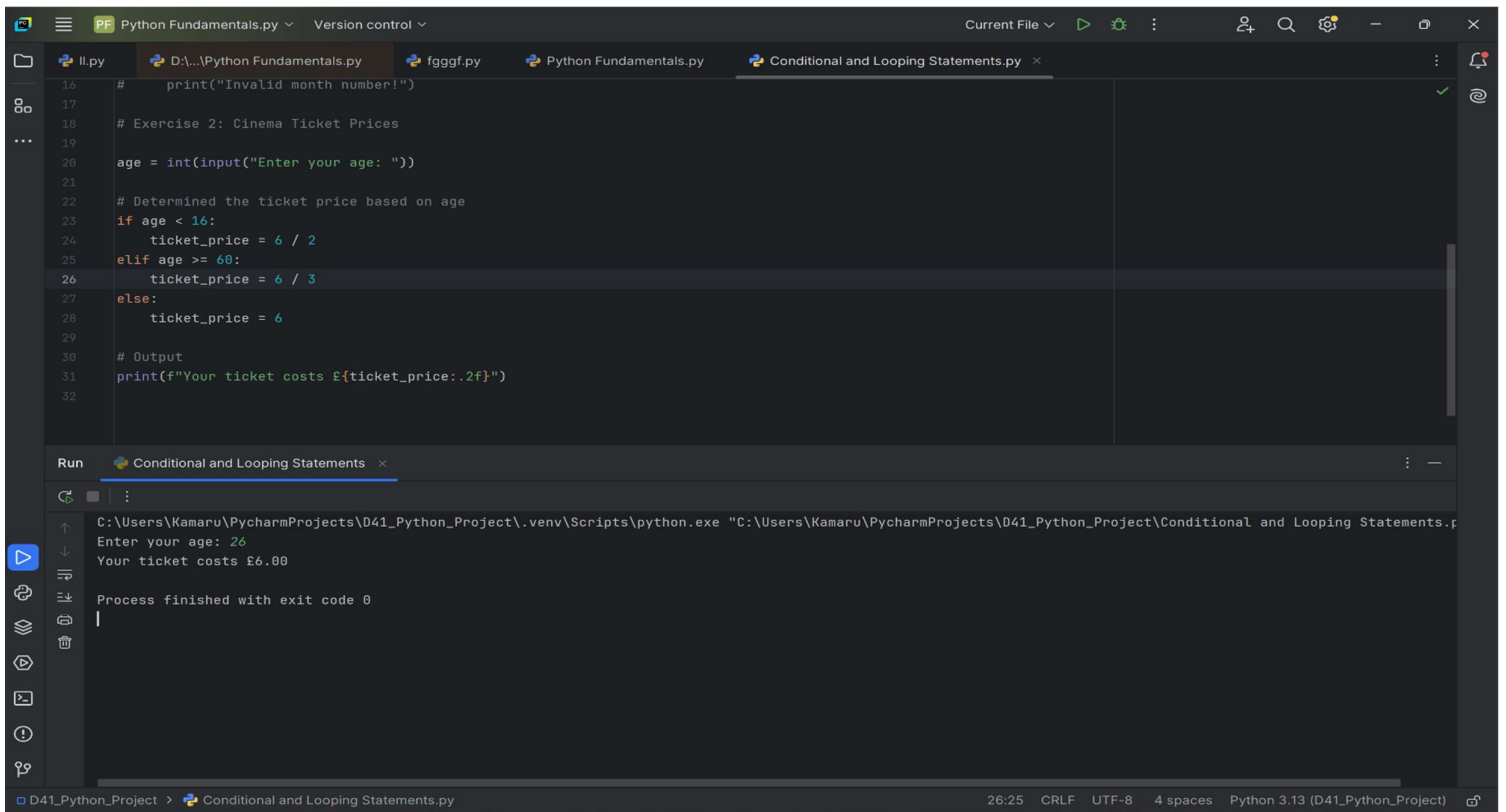
Run: Conditional and Looping Statements

C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.py"

Enter the month: 13
Invalid month number!

Process finished with exit code 0

2. CINEMA TICKET PRICES



The screenshot shows the PyCharm IDE with a Python script titled "Conditional and Looping Statements.py". The script calculates cinema ticket prices based on age. The Run console shows the output for an input age of 26, resulting in a ticket price of £6.00.

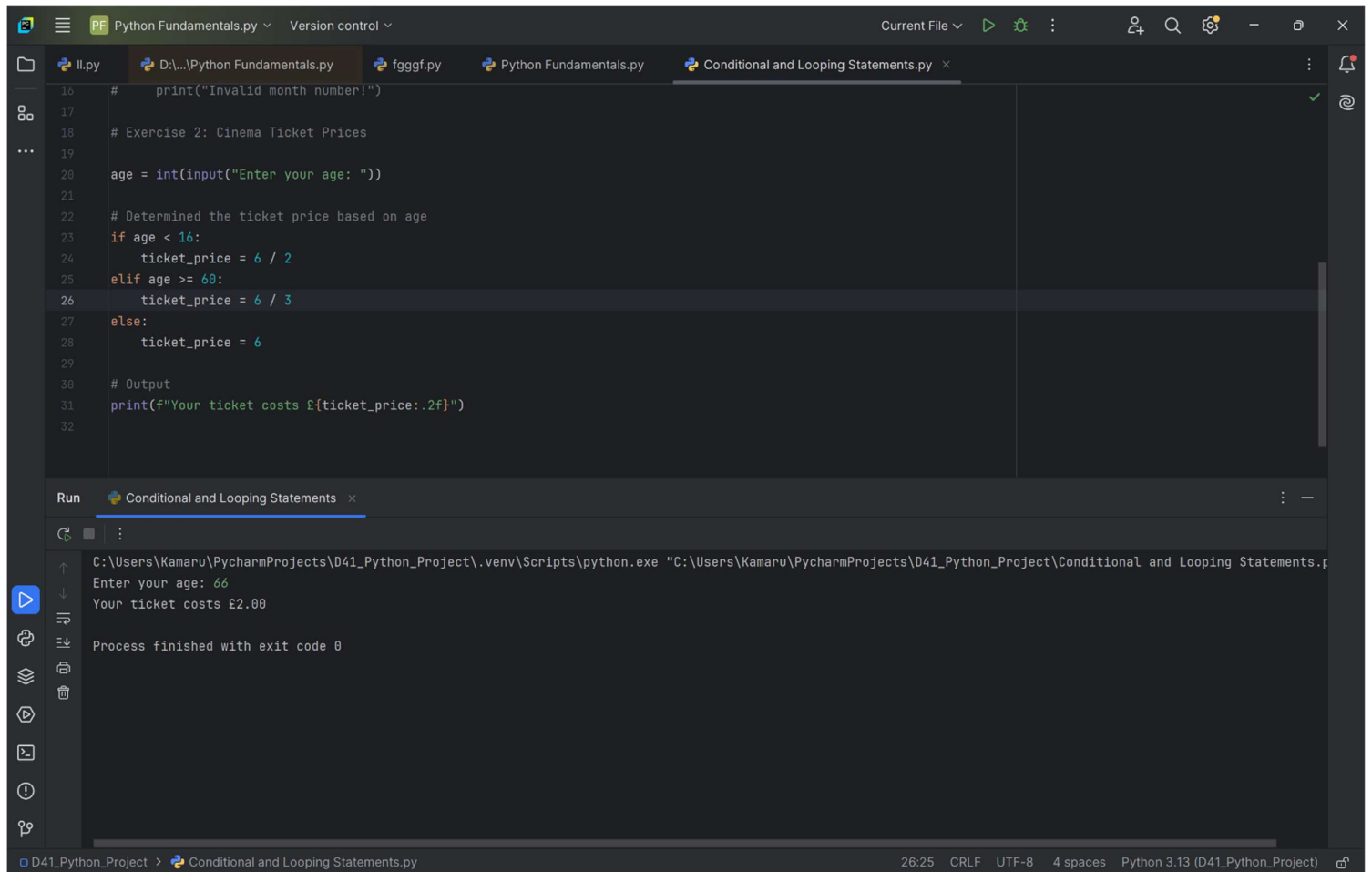
```
16 # print("Invalid month number!")
17
18 # Exercise 2: Cinema Ticket Prices
19
20 age = int(input("Enter your age: "))
21
22 # Determined the ticket price based on age
23 if age < 16:
24     ticket_price = 6 / 2
25 elif age >= 60:
26     ticket_price = 6 / 3
27 else:
28     ticket_price = 6
29
30 # Output
31 print(f"Your ticket costs £{ticket_price:.2f}")
32
```

Run Conditional and Looping Statements

C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.py"

Enter your age: 26
Your ticket costs £6.00

Process finished with exit code 0



The screenshot shows the PyCharm IDE with the same Python script. The Run console shows the output for an input age of 66, resulting in a ticket price of £2.00.

```
16 # print("Invalid month number!")
17
18 # Exercise 2: Cinema Ticket Prices
19
20 age = int(input("Enter your age: "))
21
22 # Determined the ticket price based on age
23 if age < 16:
24     ticket_price = 6 / 2
25 elif age >= 60:
26     ticket_price = 6 / 3
27 else:
28     ticket_price = 6
29
30 # Output
31 print(f"Your ticket costs £{ticket_price:.2f}")
32
```

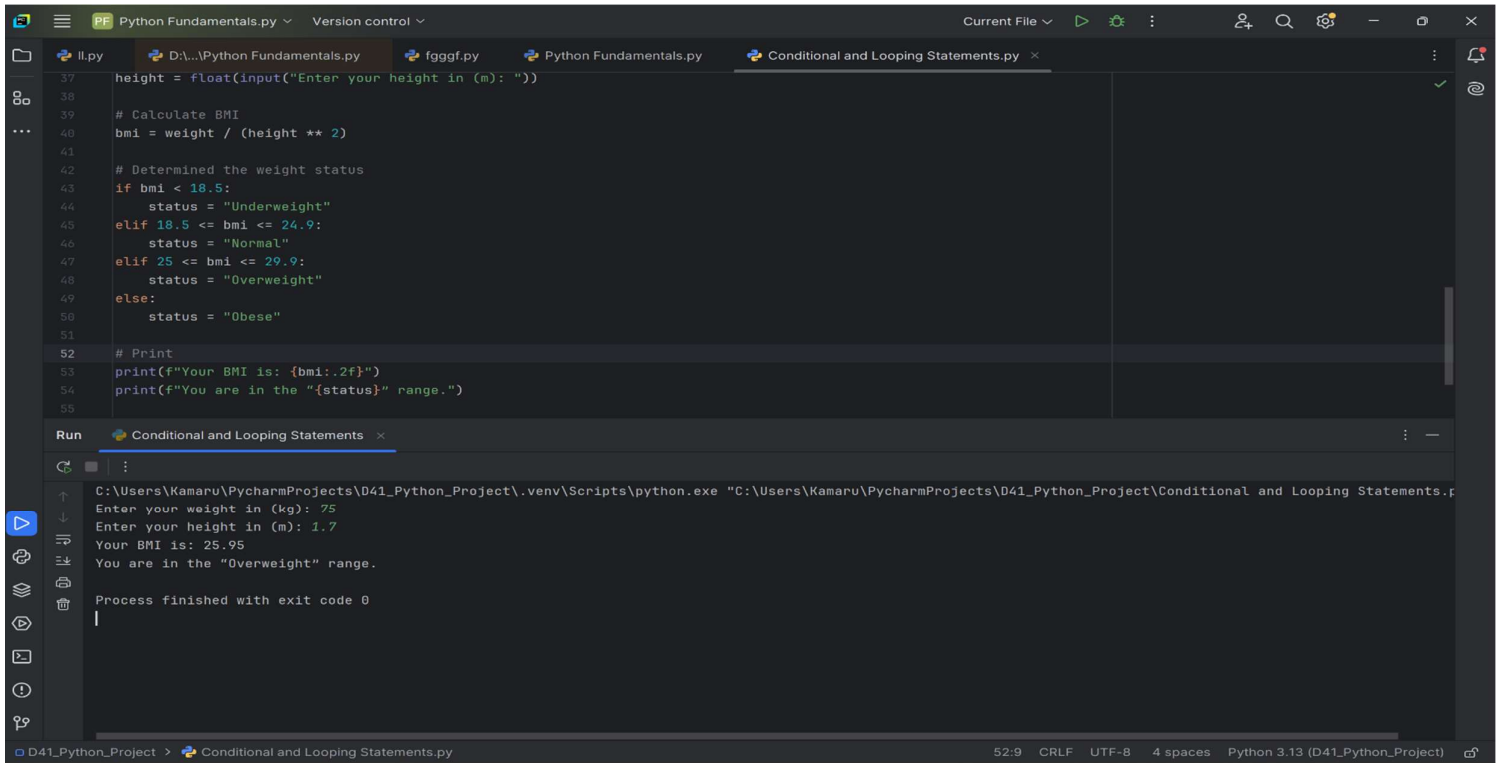
Run Conditional and Looping Statements

C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.py"

Enter your age: 66
Your ticket costs £2.00

Process finished with exit code 0

3.BMI



The screenshot shows a PyCharm IDE with a Python script for BMI calculation. The script prompts the user for weight and height, calculates the BMI, and determines the weight status based on predefined ranges. The output window shows the execution results for weight 75 and height 1.7, resulting in a BMI of 25.95 and a status of "Overweight".

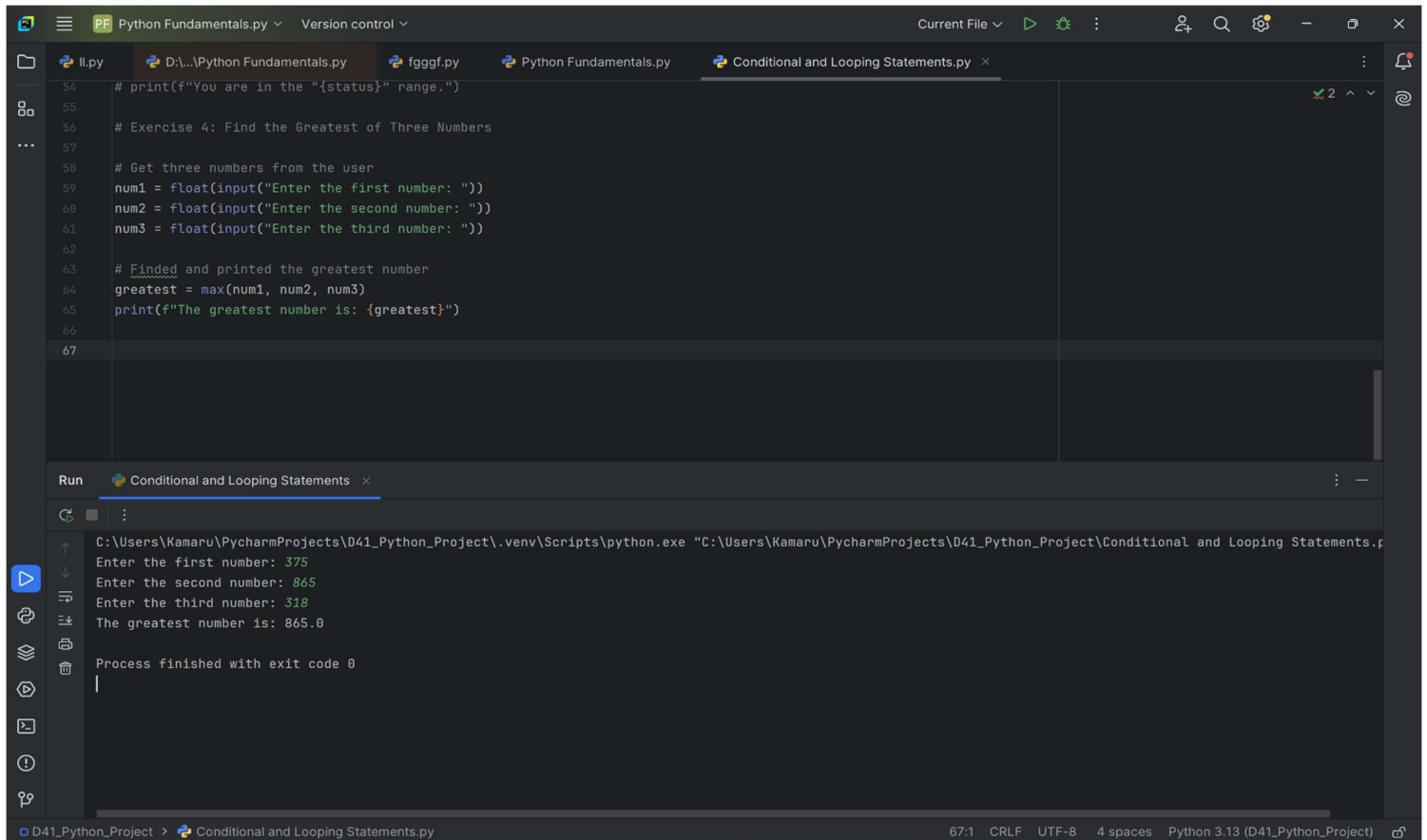
```
37 height = float(input("Enter your height in (m): "))
38
39 # Calculate BMI
40 bmi = weight / (height ** 2)
41
42 # Determined the weight status
43 if bmi < 18.5:
44     status = "Underweight"
45 elif 18.5 <= bmi <= 24.9:
46     status = "Normal"
47 elif 25 <= bmi <= 29.9:
48     status = "Overweight"
49 else:
50     status = "Obese"
51
52 # Print
53 print(f"Your BMI is: {bmi:.2f}")
54 print(f"You are in the \"{status}\" range.")
55
```

Run Conditional and Looping Statements

```
C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.p
Enter your weight in (kg): 75
Enter your height in (m): 1.7
Your BMI is: 25.95
You are in the "Overweight" range.

Process finished with exit code 0
```

4.GREATEST THREE NUMBERS



The screenshot shows a PyCharm IDE with a Python script for finding the greatest of three numbers. The script prompts the user for three numbers and uses the max() function to determine the greatest number. The output window shows the execution results for numbers 375, 865, and 318, resulting in the greatest number being 865.0.

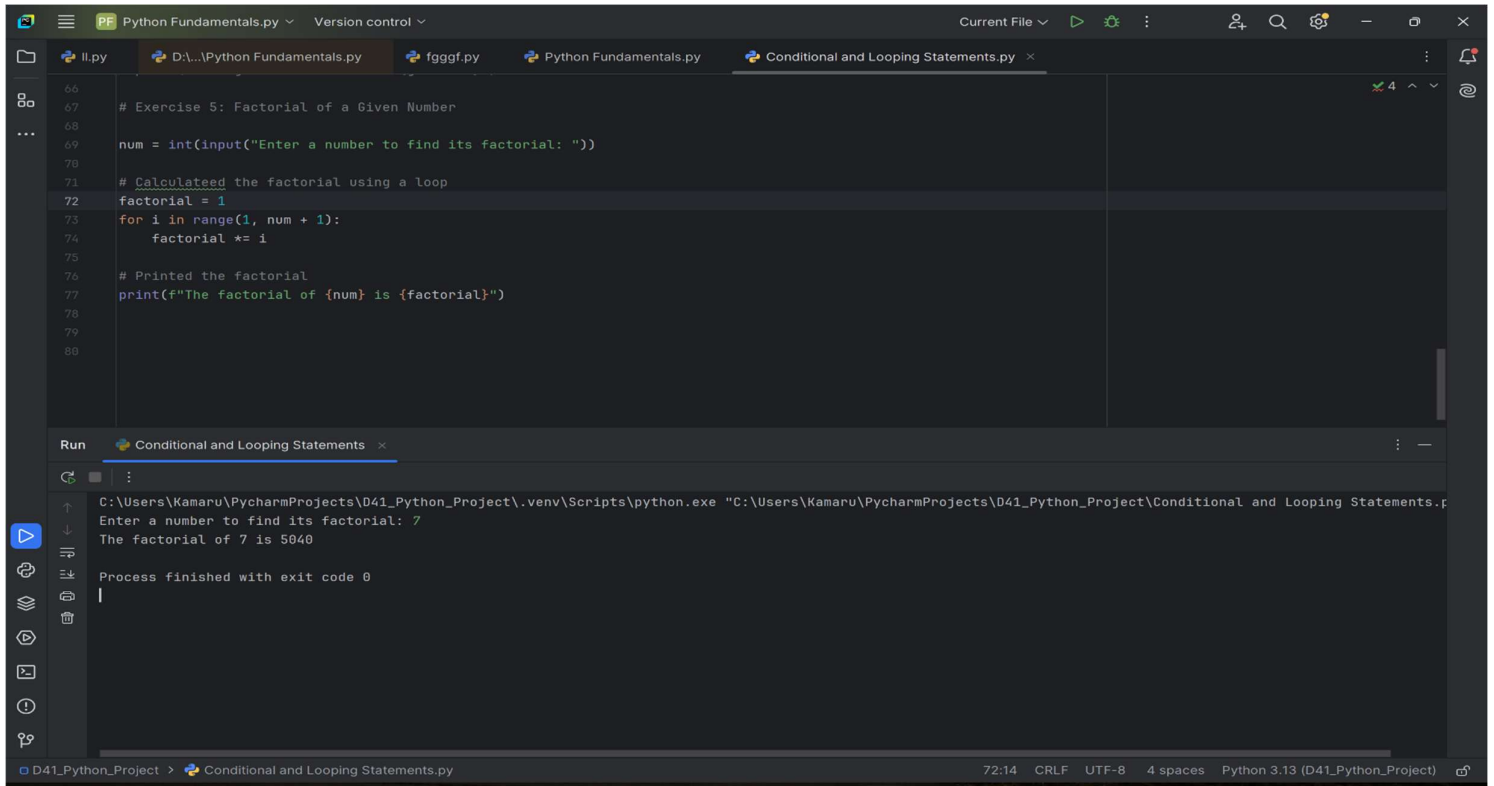
```
54 # print(f"You are in the \"{status}\" range.")
55
56 # Exercise 4: Find the Greatest of Three Numbers
57
58 # Get three numbers from the user
59 num1 = float(input("Enter the first number: "))
60 num2 = float(input("Enter the second number: "))
61 num3 = float(input("Enter the third number: "))
62
63 # Finded and printed the greatest number
64 greatest = max(num1, num2, num3)
65 print(f"The greatest number is: {greatest}")
66
67
```

Run Conditional and Looping Statements

```
C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.p
Enter the first number: 375
Enter the second number: 865
Enter the third number: 318
The greatest number is: 865.0

Process finished with exit code 0
```

5. FACTORIAL



The screenshot shows the PyCharm IDE with a Python file named 'Conditional and Looping Statements.py'. The code implements a factorial function using a for loop. The output window shows the program running successfully, taking the input '7' and outputting 'The factorial of 7 is 5040'.

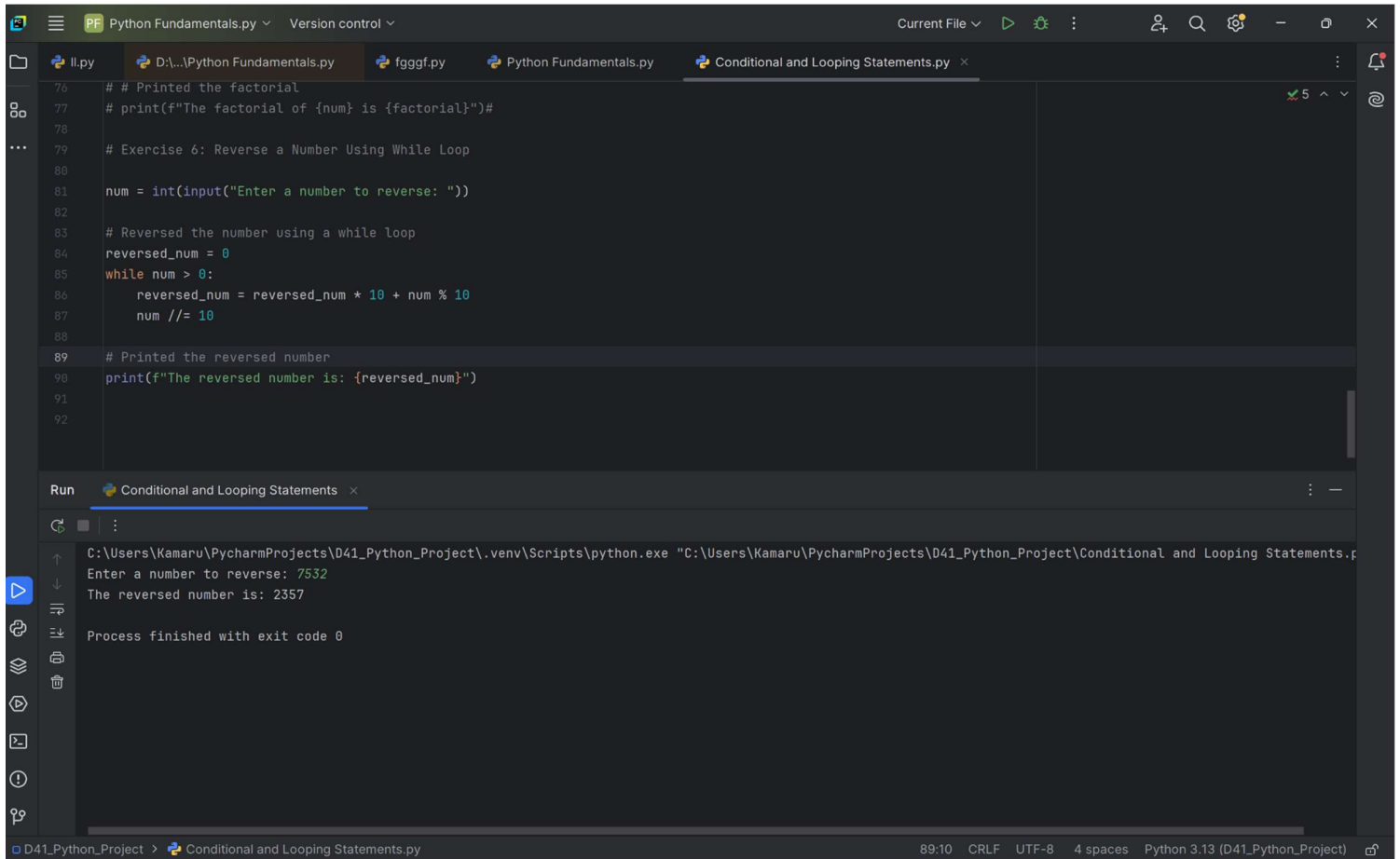
```
66
67 # Exercise 5: Factorial of a Given Number
68
69 num = int(input("Enter a number to find its factorial: "))
70
71 # Calculateed the factorial using a loop
72 factorial = 1
73 for i in range(1, num + 1):
74     factorial *= i
75
76 # Printed the factorial
77 print(f"The factorial of {num} is {factorial}")
78
79
80
```

Run Conditional and Looping Statements

```
C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.p
Enter a number to find its factorial: 7
The factorial of 7 is 5040

Process finished with exit code 0
```

6. REVERSE NUMBER



The screenshot shows the PyCharm IDE with a Python file named 'Conditional and Looping Statements.py'. The code implements a reverse number function using a while loop. The output window shows the program running successfully, taking the input '7532' and outputting 'The reversed number is: 2357'.

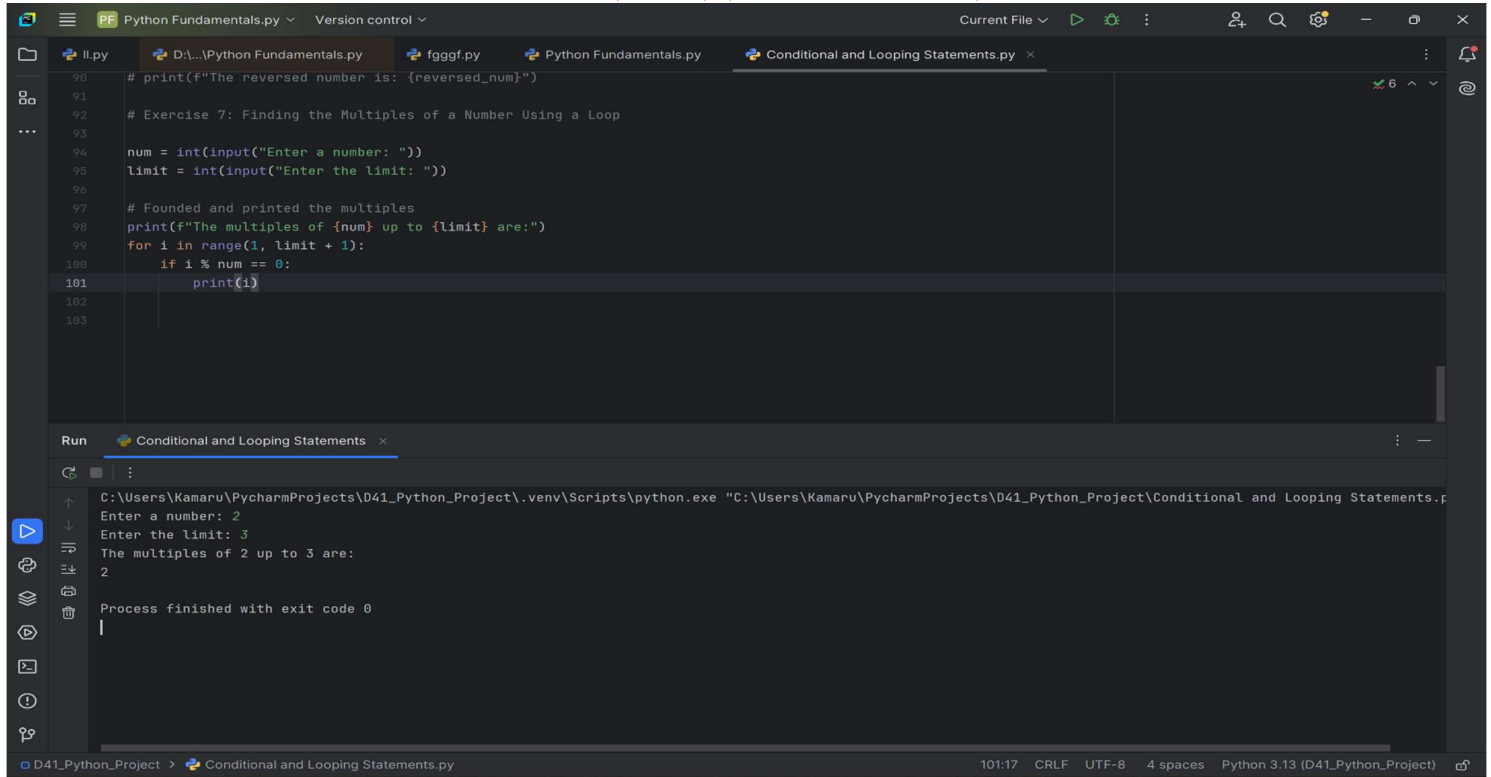
```
76 # # Printed the factorial
77 # print(f"The factorial of {num} is {factorial}")#
78
79 # Exercise 6: Reverse a Number Using While Loop
80
81 num = int(input("Enter a number to reverse: "))
82
83 # Reversed the number using a while loop
84 reversed_num = 0
85 while num > 0:
86     reversed_num = reversed_num * 10 + num % 10
87     num //= 10
88
89 # Printed the reversed number
90 print(f"The reversed number is: {reversed_num}")
91
92
```

Run Conditional and Looping Statements

```
C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.p
Enter a number to reverse: 7532
The reversed number is: 2357

Process finished with exit code 0
```

7. MULTIPLES OF NUMBER



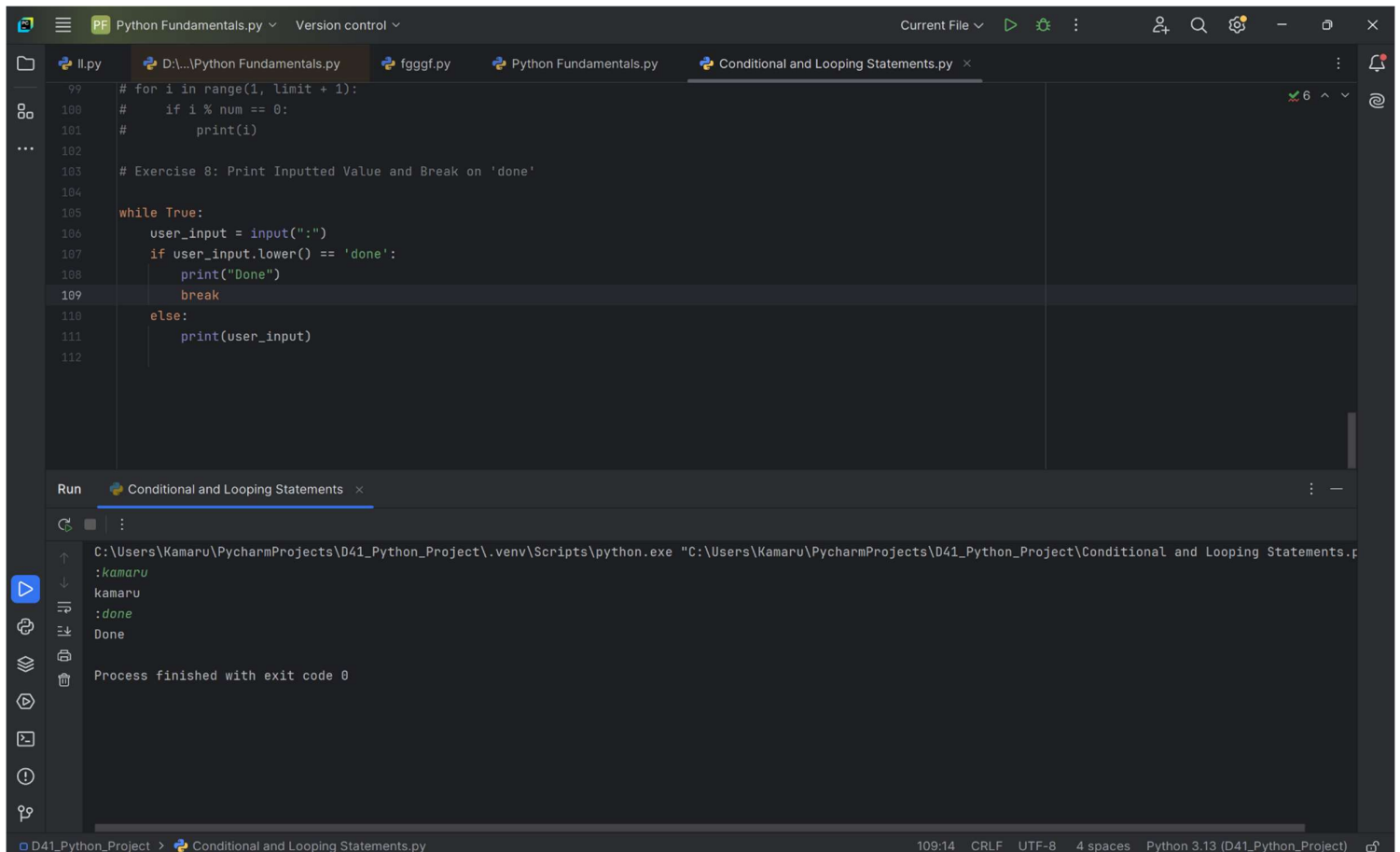
The screenshot shows the PyCharm IDE with a Python file named 'Conditional and Looping Statements.py'. The code defines a function to find multiples of a number. The Run window shows the execution output.

```
90 # print(f"The reversed number is: {reversed_num}")
91
92 # Exercise 7: Finding the Multiples of a Number Using a Loop
93
94 num = int(input("Enter a number: "))
95 limit = int(input("Enter the limit: "))
96
97 # Founded and printed the multiples
98 print(f"The multiples of {num} up to {limit} are:")
99 for i in range(1, limit + 1):
100     if i % num == 0:
101         print(i)
102
103
```

Run Conditional and Looping Statements

```
C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.py"
Enter a number: 2
Enter the limit: 3
The multiples of 2 up to 3 are:
2
Process finished with exit code 0
```

8. PRINT INPUT VALUE AND BREAK ON "DONE"



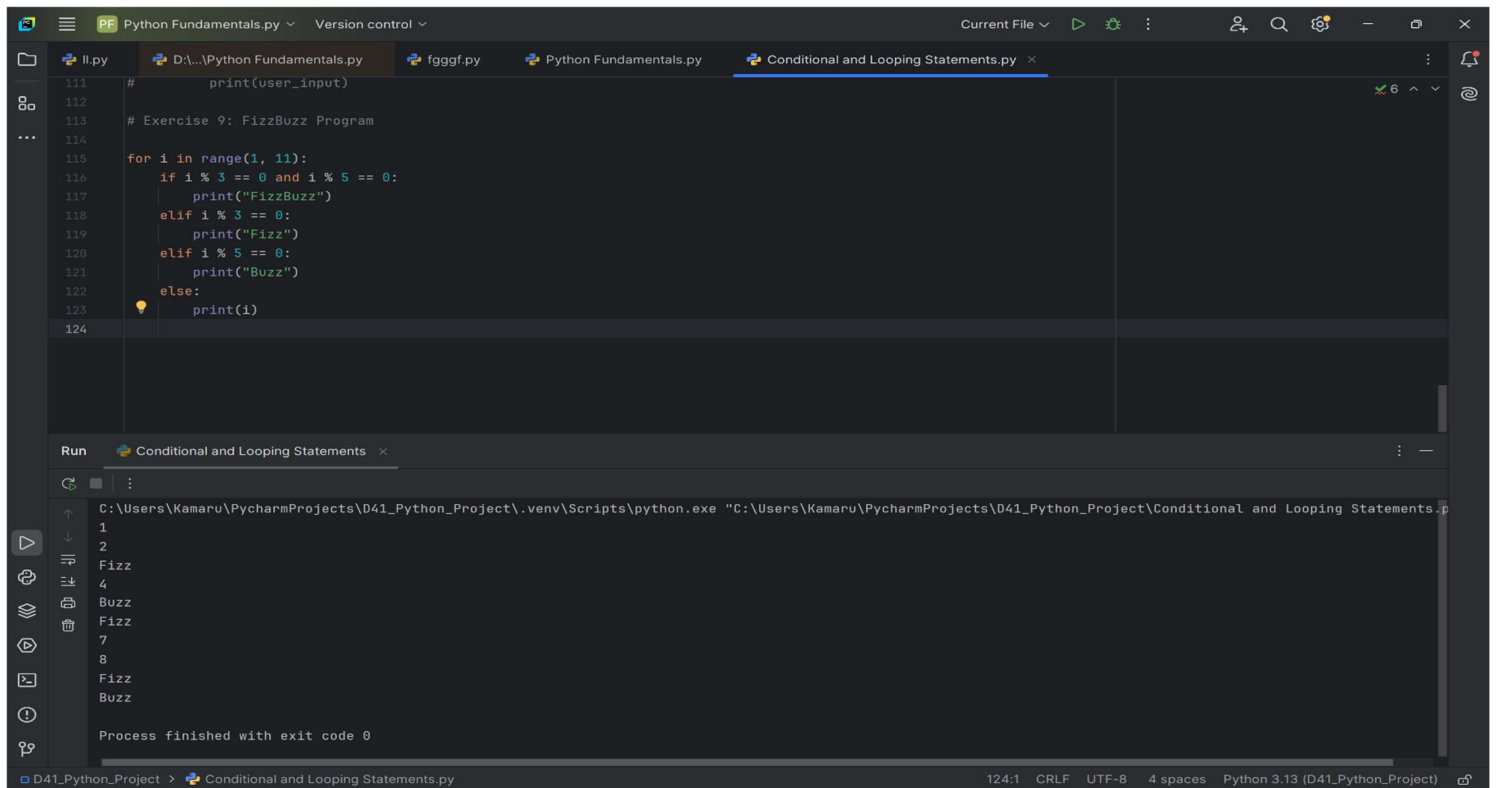
The screenshot shows the PyCharm IDE with a Python file named 'Conditional and Looping Statements.py'. The code uses a while loop to print user input until 'done' is entered. The Run window shows the execution output.

```
99 # for i in range(1, limit + 1):
100 #     if i % num == 0:
101 #         print(i)
102
103 # Exercise 8: Print Inputted Value and Break on 'done'
104
105 while True:
106     user_input = input(":")
107     if user_input.lower() == 'done':
108         print("Done")
109         break
110     else:
111         print(user_input)
112
```

Run Conditional and Looping Statements

```
C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.py"
:kamaru
kamaru
:done
Done
Process finished with exit code 0
```

9. FIZZBUZZ PROGRAMME



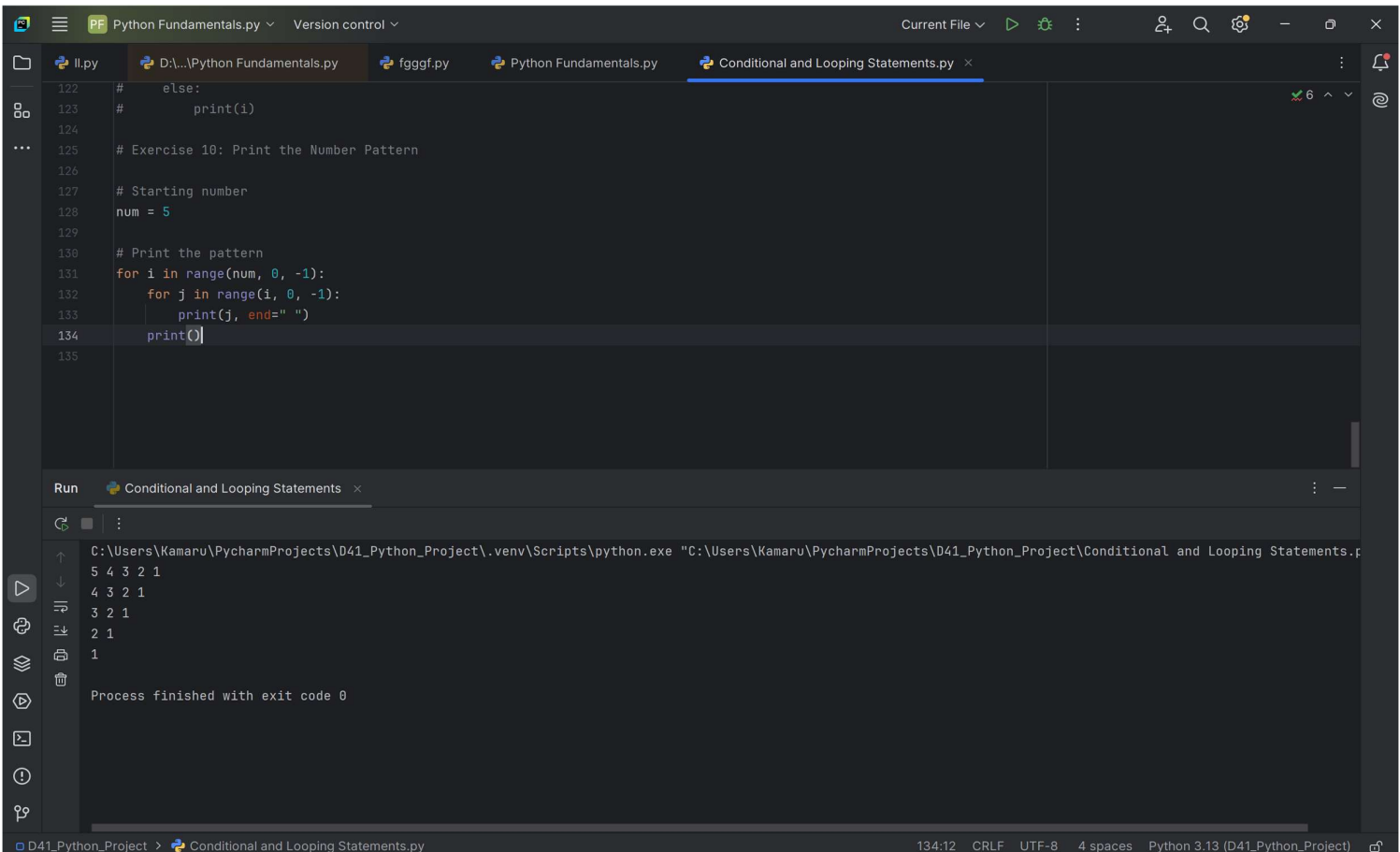
The screenshot shows the PyCharm IDE with a Python file named 'Conditional and Looping Statements.py'. The code implements a FizzBuzz program. The output window shows the results of running the program, which prints numbers from 1 to 10, replacing multiples of 3 with 'Fizz', multiples of 5 with 'Buzz', and multiples of both with 'FizzBuzz'.

```
111 # print(user_input)
112
113 # Exercise 9: FizzBuzz Program
114
115 for i in range(1, 11):
116     if i % 3 == 0 and i % 5 == 0:
117         print("FizzBuzz")
118     elif i % 3 == 0:
119         print("Fizz")
120     elif i % 5 == 0:
121         print("Buzz")
122     else:
123         print(i)
124
```

Run Conditional and Looping Statements

```
C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.py"
1
2
Fizz
4
Buzz
Fizz
7
8
Fizz
Buzz
Process finished with exit code 0
```

10. NUMBER PATTERN



The screenshot shows the PyCharm IDE with a Python file named 'Conditional and Looping Statements.py'. The code implements a program to print a number pattern. The output window shows the results of running the program, which prints a pattern of numbers from 5 down to 1, with each row containing a decreasing sequence of numbers from the current row number down to 1.

```
122 # else:
123 #     print(i)
124
125 # Exercise 10: Print the Number Pattern
126
127 # Starting number
128 num = 5
129
130 # Print the pattern
131 for i in range(num, 0, -1):
132     for j in range(i, 0, -1):
133         print(j, end=" ")
134     print()
135
```

Run Conditional and Looping Statements

```
C:\Users\Kamaru\PycharmProjects\D41_Python_Project\.venv\Scripts\python.exe "C:\Users\Kamaru\PycharmProjects\D41_Python_Project\Conditional and Looping Statements.py"
5 4 3 2 1
4 3 2 1
3 2 1
2 1
1
Process finished with exit code 0
```