





The image shows a PyCharm IDE window for a project named 'entri\_d41\_PythonProject'. The editor displays a Python file named 'BodyMassIndex.py' with the following code:

```
1 #Exercise 3 Name your file: BodyMassIndex.py Write a program to calculate your BMI and give weight st
2 # Body Mass Index (BMI) is an internationally used measurement to check if you are a healthy weight for you
3 # The metric BMI formula accepts weight in kilograms and height in meters:
4 # BMI= weight(kg)/height2(m2) BMI Weight Status Categories table BMI range - kg/m2 Category Below 18.5 Under
5 # An example run of the program (numbers in bold are typed in by the user) Enter your weight in (kg): 75 Ent
6 weight=float(input("Enter your weight"))
7 height=float(input("Enter your height"))
8 BMI = weight / (height ** 2)
9 print(f"Your BMI is: {BMI:.2f}")
10 if BMI<18.5:
```

The 'Run' console at the bottom shows the execution of the program:

```
Run C:\Users\ajayc\PycharmProjects\entri_d41_PythonProject\.venv\Scripts\python.exe C:\Users\ajayc\PycharmProjects\
Enter your weight 75
Enter your height 1.70
Your BMI is: 25.95
You are in the Overweight range.
```

The status bar at the bottom indicates the file is 'BodyMassIndex.py' in the 'entri\_d41\_PythonProject' directory, using Python 3.13 with UTF-8 encoding, 4 spaces for indentation, and CRLF line endings. The time is 7:30.

The image shows a Python IDE window with a project named 'entri\_d41\_PythonProject'. The main editor displays a Python script for finding the greatest of three numbers. The code is as follows:

```
18
19 # Exercise 4 Write a Python program to receive 3 numbers from the user and print the greatest among them.
20 num1=float(input("enter a number1"))
21 num2=float(input("enter a number2"))
22 num3=float(input("enter a number3"))
23
24 if num1>=num2 and num1>=num3:
25     print("greatest number is" " " f"{num1}")
26 elif num2>=num1 and num2>=num3:
27     print("greatest number is" " " f"{num2}")
28 else:
29     print("greatest number is" " " f"{num3}")
```

Below the editor is a 'Run' console window showing the execution of the program. The user has entered the values 10, 20, and 30 for the three numbers, and the program has correctly identified 30.0 as the greatest number.

```
Run BodyMassIndex x Month names (1) x
↑
↓
enter a number1 10
enter a number2 20
enter a number3 30
greatest number is 30.0
```

The status bar at the bottom indicates the file is 'BodyMassIndex.py' in the 'entri\_d41\_PythonProject' directory, using Python 3.13, with CRLF line endings, UTF-8 encoding, and 4 spaces for indentation.

The image shows a PyCharm IDE window with a Python project named "entri\_d41\_PythonProject". The main editor displays a Python script with the following code:

```
31 #Exercise 5 Find the factorial of a given number using loops(note the number is received from the use
32 num=int(input("Enter a number:"))
33 factorial=1
34 if num==0 or num==1:
35     print("factorial is 1")
36 elif num<0:
37     print("Enter a positive number")
38 else:
39     for i in range(1,num+1):
40         factorial=factorial*i
41     print("Factorial of the number is",factorial)
42 # Exercise 6 Reverse a number using while loop
```

The script is executed, and the output is shown in the terminal window:

```
Run BodyMassIndex x Month names (1) x
C:\Users\ajayc\PycharmProjects\entri_d41_PythonProject\.venv\Scripts\python.exe C:\Users\ajayc\PycharmProjects\
Enter a number: 5
Factorial of the number is 120
Process finished with exit code 0
```

The status bar at the bottom indicates the file is "BodyMassIndex.py", the cursor is at line 35, column 35, and the file encoding is UTF-8.

The image shows a PyCharm IDE window for a project named 'entri\_d41\_PythonProject'. The editor displays a Python script with the following code:

```
40 #     factorial=factorial*i
41 #     print("Factorial of the number is",factorial)
42 # Exercise 6 Reverse a number using while loop
43 x=int(input("Enter a number"))
44 copy=x
45 rev=0
46 while(x>0):
47     y=x%10
48     rev=rev*10+y
49     x=x//10
50 print("reverse of the number",copy,"is",rev)
51
```

Below the editor, the 'Run' console shows the execution of the script. The command prompt indicates the script was run from the project's virtual environment. The input '23' was provided, and the output was 'reverse of the number 23 is 32'. The console also shows 'Process finished with exit code 0'.

At the bottom of the IDE, the status bar indicates the current file is 'BodyMassindex.py', the cursor is at line 43, column 1, and the file encoding is UTF-8.

The screenshot shows the PyCharm IDE interface. The top toolbar includes icons for running, debugging, and other IDE functions. The editor window displays a Python script with the following code:

```
52 # Exercise 7 Finding the multiples of a number using loop
53 x=int(input("Enter a number:"))
54 print("multiples of the number",x,"are:")
55 for i in range(1,11):
56     print(i*x)
```

Below the editor, the Run console shows the execution of the script. The command prompt path is visible, followed by the input and the resulting output:

```
C:\Users\ajayc\PycharmProjects\entri_d41_PythonProject\.venv\Scripts\python.exe C:\Users\ajayc\PycharmProjects\entri_d41_PythonProject\BodyMassIndex.py
Enter a number: 5
multiples of the number 5 are:
5
10
15
20
25
30
35
40
```

The status bar at the bottom indicates the current file is `BodyMassIndex.py`, with 54 lines of code (110 characters, 3 line breaks), using CRLF line endings, UTF-8 encoding, 4 spaces for indentation, and Python 3.13.



The screenshot shows the PyCharm IDE interface. The top toolbar includes icons for file operations, running, and debugging. The main editor window displays a Python script for Exercise 9, which implements the FizzBuzz algorithm. The code is as follows:

```
64 # Exercise 9 Write a program that prints the numbers from 1 to 10.
65 # But for multiples of three print "Fizz" instead of the number and for the multiple of five print "Buzz".
66 # For numbers which are multiples of both three and five print "FizzBuzz"
67 for i in range(1,11):
68     if i%3==0 and i%5==0:
69         print("FizzBuzz")
70     elif i%5==0:
71         print("Buzz")
72     elif i%3==0:
73         print("Fizz")
```

Below the editor, the 'Run' console shows the execution of the script. The output is:

```
C:\Users\ajayc\PycharmProjects\entri_d41_PythonProject\.venv\Scripts\python.exe C:\Users\ajayc\PycharmProjects\entri_d41_PythonProject\BodyMassIndex.py
1
2
Fizz
4
Buzz
Fizz
```

The status bar at the bottom indicates the file path, character count (178 chars), line breaks (8), and the Python version (3.13).



The screenshot shows the PyCharm IDE interface. The top toolbar includes icons for file operations, running, and search. The editor window displays a Python script with the following content:

```
76  
77 # Exercise 10 Write a program to print the following pattern:  
78 # 5 4 3 2 1  
79 # 4 3 2 1  
80 # 3 2 1  
81 # 2 1  
82 # 1  
83 for i in range(5,0,-1):  
84     for j in range(i,0,-1):  
85         print(j,end=" ")  
86     print()
```

The code is currently running, as indicated by the 'Run' button in the bottom toolbar. The output window at the bottom shows the resulting pattern:

```
C:\Users\ajayc\PycharmProjects\entri_d41_PythonProject\.venv\Scripts\python.exe C:\Users\ajayc\PycharmProjects\entri_d41_PythonProject\BodyMassIndex.py  
5 4 3 2 1  
4 3 2 1  
3 2 1  
2 1  
1
```

The status bar at the bottom indicates the file is 'BodyMassIndex.py' with 83:20 (87 chars, 3 line breaks), CRLF line endings, UTF-8 encoding, 4 spaces indentation, and Python 3.13 interpreter.

The screenshot shows the PyCharm IDE interface. The top toolbar includes icons for file operations, search, and running code. The project explorer on the left shows a project named 'entri\_d41\_PythonProject' with several files: 'in 1.py', 'Data structures.py', 'Tuples.py', 'Dictionaries.py', 'Statements.py', 'Month names.py', and 'BodyMassIndex.py'. The main editor window displays the code for 'BodyMassIndex.py'. The code includes comments for Exercise 8 and Exercise 9, and a while loop that prints the input value until it is 'done'. The Run tool window at the bottom shows the execution of the script, with the command 'C:\Users\ajayc\PycharmProjects\entri\_d41\_PythonProject\.venv\Scripts\python.exe C:\Users\ajayc\PycharmProjects\entri\_d41\_PythonProject\BodyMassIndex.py' and the output 'Enter a value or(done to exit) done' and 'done'. The status bar at the bottom indicates the file is 'BodyMassIndex.py' with 6110 characters, 4 line breaks, and is using CRLF line endings, UTF-8 encoding, and 4 spaces for indentation.

```
56 # print(1*x)
57 # Exercise 8 Write a program to print the inputted value as it is and break the loop if the value is 'done'.
58 # Example run of the program :hello there hello there :finished finished :done Done
59 x=input("Enter a value or(done to exit)")
60 while x.lower()=="done":
61     break
62 else:
63     print(x)
64
65 # Exercise 9 Write a program that prints the numbers from 1 to 10.
66 # But for multiples of three print "Fizz" instead of the number and for the multiple of five print "Buzz".
```

Run BodyMassIndex x Month names (1) x

C:\Users\ajayc\PycharmProjects\entri\_d41\_PythonProject\.venv\Scripts\python.exe C:\Users\ajayc\PycharmProjects\entri\_d41\_PythonProject\BodyMassIndex.py

Enter a value or(done to exit) done

done

Process finished with exit code 0

entri\_d41\_PythonProject > BodyMassIndex.py 6110 (95 chars, 4 line breaks) CRLF UTF-8 4 spaces Python 3.13 (entri\_d41\_PythonProject)