

Home Assignment <1>: FizzBuzz using Functions

Learning Objective:

The learning objective of this assignment is to practice using **functions, arguments, loops, and conditional statements** in Python.

Expected Completion Time:

Best Case: 15 minutes

Average Case: 20 minutes

Assignment Details:

Write a Python program to:

1. Define a function that accepts an integer n .
2. For every positive integer $i \leq n$, apply the following rules:
 - Print **"FizzBuzz"** if i is divisible by both 3 and 5.
 - Print **"Fizz"** if i is divisible by 3 (but not 5).
 - Print **"Buzz"** if i is divisible by 5 (but not 3).
 - Print the number itself (as a string) if none of the above conditions are true.
3. Call the function with user input as the argument.

Requirements:

- Define a function, e.g., `def fizzbuzz(n):`
- Use a `for` loop to iterate from 1 to n .
- Use conditional checks (`if-elif-else`) to print correct output.
- Get the value of n from the user and pass it to the function.

Hints to Solve:

- Use the modulo operator (%) to check divisibility.
- Make sure to check `i % 3 == 0` and `i % 5 == 0` **before** checking individually for 3 or 5.

Expected Outcome:

Upon completion of this assignment, you should be able to:

- Write and call functions in Python with arguments.
- Use loops to iterate over a range of numbers.
- Apply conditional statements (`if-elif-else`) to control program logic.
- Produce output such as:

If input = 5, output should be:

1
2

```
Fizz  
4  
Buzz
```

If input = 15, output should include:

```
...  
13  
14  
FizzBuzz
```