# FizzBuzz – Python Project (Word Doc)

## Problem Brief (Humanized)

FizzBuzz is a simple counting game. We count numbers starting from 1.  
• If a number is divisible by 3, we say “Fizz”.  
• If a number is divisible by 5, we say “Buzz”.  
• If a number is divisible by both 3 and 5, we say “Fizz Buzz”.  
• Otherwise, we just print the number.  
  
Goal: Make the computer play the first 100 rounds of FizzBuzz.

## Step-by-Step Plan

1) Use a loop to go from 1 to 100.  
2) Use the modulo operator (%) to test divisibility.  
3) Check the conditions in this order:  
 - divisible by 3 and 5 → 'Fizz Buzz'  
 - divisible by only 3 → 'Fizz'  
 - divisible by only 5 → 'Buzz'  
 - else → print the number

## Python Code – Classic (1 to 100)

# FizzBuzz – Classic Version (1..100)  
  
for number in range(1, 101): # loop from 1 to 100  
 if number % 3 == 0 and number % 5 == 0: # divisible by 3 and 5  
 print("Fizz Buzz")  
 elif number % 3 == 0: # divisible by 3 only  
 print("Fizz")  
 elif number % 5 == 0: # divisible by 5 only  
 print("Buzz")  
 else:  
 print(number) # otherwise just print the number

## Python Code – User-Decides Range

# FizzBuzz – User Range Version  
  
limit = int(input("Enter last number (e.g., 100): "))  
for number in range(1, limit + 1):  
 if number % 3 == 0 and number % 5 == 0:  
 print("Fizz Buzz")  
 elif number % 3 == 0:  
 print("Fizz")  
 elif number % 5 == 0:  
 print("Buzz")  
 else:  
 print(number)

## ✅ Expected Output (First 15 Lines)

1  
2  
Fizz  
4  
Buzz  
Fizz  
7  
8  
Fizz  
Buzz  
11  
Fizz  
13  
14  
Fizz Buzz

## 💡 Notes & Tips

• Use range(1, 101) to include 100.  
• Always check 'both 3 and 5' before checking individually.  
• % (modulo) returns the remainder. If remainder is 0, the number is divisible.