

Basic python Assignment 1

1. If-Else Statements

- **Question 1:** Write a program that takes an integer input from the user and prints whether the number is positive, negative, or zero.
- **Question 2:** Write a program that checks if a given year is a leap year. A leap year is divisible by 4, but not by 100, unless it is also divisible by 400.

2. For Loops

- **Question 3:** Write a program that prints the first 10 natural numbers using a for loop.
- **Question 4:** Write a program that calculates and prints the sum of all even numbers from 1 to 50.
- **Question 5:** Write a program that takes a list of integers and prints each number in the list that is greater than 10.
- **Question 6:** Write a program that takes an integer input from the user and prints the multiplication table for that number up to 10.

3. While Loops

- **Question 7:** Write a program that prints the numbers from 1 to 5 using a while loop.
- **Question 8:** Write a program that takes an integer input from the user and prints the factorial of that number using a while loop.
- **Question 9:** Write a program that takes a list of integers and calculates the sum of all elements using a while loop.

4. Combining Loops and Conditional Statements

- **Question 10:** Write a program that prints all the numbers from 1 to 20. For multiples of 3, print "Fizz" instead of the number, and for multiples of 5, print "Buzz". For numbers that are multiples of both 3 and 5, print "FizzBuzz".