

Assignment 3(Loop)

For Loop

- 1) Write a program that prints the numbers from 1 to 10.
- 2) Write a program that calculates the sum of all the numbers from 1 to 100.
- 3) Write a program that prints the even numbers from 1 to 20.
- 4) Write a program that calculates the factorial of a given number using a for loop.
- 5) Write a program that prints the multiplication table of a given number.
- 6) Write a program that finds the maximum number in a given list using a for loop.
- 7) Write a program that calculates the average of a given list of numbers.
- 8) Write a program that finds the minimum number in a given list using a for loop.
- 9) Write a program that prints the Fibonacci series up to a given number.
- 10) Write a program that prints the prime numbers up to a given number.
- 11) Write a program that prints the odd numbers from 1 to 30.
- 12) Write a program that prints the reverse of a given string using a for loop.
- 13) Write a program that prints the first 10 numbers in the geometric sequence 2, 4, 8, 16, ...
- 14) Write a program that prints the first 10 numbers in the arithmetic sequence 1, 3, 5, 7, ...
- 15) Write a program that prints the numbers from 1 to 100, but 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".
- 16) Write a program that takes a list of numbers and removes any duplicates.
- 17) Write a program that calculates the sum of the squares of the numbers from 1 to 50.
- 18) Write a program that counts the number of vowels in a given string using a for loop.
- 19) Write a program that finds the second largest number in a given list.
- 20) Write a program that prints all the ASCII characters.
- 21) Write a program that checks if a given number is a palindrome using a for loop.
- 22) Write a program that prints the square root of all the numbers from 1 to 25.
- 23) Write a program that prints the powers of 2 up to a given number.
- 24) Write a program that prints the first 10 numbers in the sequence 1, 1, 2, 3, 5, 8, 13, ... (the Fibonacci sequence).
- 25) Write a program that calculates the sum of the first 20 numbers in the sequence 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, ...
- 26) Write a program that prints the ASCII values of all the characters in a given string.
- 27) Write a program that checks if a given string is a palindrome using a for loop.
- 28) Write a program that prints the sum of all the odd numbers from 1 to 50.
- 29) Write a program that prints the sum of all the even numbers from 1 to 50.
- 30) Write a program that takes a list of numbers and prints the square of each number in the list.

While Loop

- 31) Write a program that prints the numbers from 1 to 10 using a while loop.
- 32) Write a program that calculates the sum of all the numbers from 1 to 100 using a while loop.
- 33) Write a program that prints the even numbers from 1 to 20 using a while loop.
- 34) Write a program that calculates the factorial of a given number using a while loop.
- 35) Write a program that prints the multiplication table of a given number using a while loop.
- 36) Write a program that finds the maximum number in a given list using a while loop.
- 37) Write a program that calculates the average of a given list of numbers using a while loop.
- 38) Write a program that finds the minimum number in a given list using a while loop.
- 39) Write a program that prints the Fibonacci series up to a given number using a while loop.
- 40) Write a program that prints the prime numbers up to a given number using a while loop.
- 41) Write a program that prints the odd numbers from 1 to 30 using a while loop.
- 42) Write a program that prints the reverse of a given string using a while loop.
- 43) Write a program that prints the first 10 numbers in the geometric sequence 2, 4, 8, 16, ... using a while loop.
- 44) Write a program that prints the first 10 numbers in the arithmetic sequence 1, 3, 5, 7, ... using a while loop.
- 45) Write a program that prints the numbers from 1 to 100, but 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" using a while loop.
- 46) Write a program that takes a list of numbers and removes any duplicates using a while loop.
- 47) Write a program that calculates the sum of the squares of the numbers from 1 to 50 using a while loop.
- 48) Write a program that counts the number of vowels in a given string using a while loop.
- 49) Write a program that finds the second largest number in a given list using a while loop.
- 50) Write a program that prints all the ASCII characters using a while loop.
- 51) Write a program that checks if a given number is a palindrome using a while loop.
- 52) Write a program that prints the square root of all the numbers from 1 to 25 using a while loop.
- 53) Write a program that prints the powers of 2 up to a given number using a while loop.
- 54) Write a program that prints the first 10 numbers in the sequence 1, 1, 2, 3, 5, 8, 13, ... (the Fibonacci sequence) using a while loop.
- 55) Write a program that calculates the sum of the first 20 numbers in the sequence 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, ... using a while loop.

- 56) Write a program that prints the ASCII values of all the characters in a given string using a while loop.
- 57) Write a program that checks if a given string is a palindrome using a while loop.
- 58) Write a program that prints the sum of all the odd numbers from 1 to 50 using a while loop.
- 59) Write a program that prints the sum of all the even numbers from 1 to 50 using a while loop.
- 60) Write a program that takes a list of numbers and prints the square of each number in the list using a while loop.