***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, 1/2, 1/4, 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***

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