## CSC 1700 – While Loop Questions

### 1. Counting with a While Loop

i = 1  
while i <= 5:  
 print(i)  
 i += 1

**Discussion Questions:**

* What numbers will this program print?
* What happens if we forget i += 1?

### 2. Summing Numbers

total = 0  
num = 1  
while num <= 4:  
 total += num  
 num += 1  
print("Total =", total)

**Discussion Questions:**

* What is the final value of total?
* How could you modify this program to sum **even numbers only**?

### 3. Input Until Quit

word = input("Enter a word (type 'quit' to stop): ")  
while word != "quit":  
 print("You typed:", word)  
 word = input("Enter a word (type 'quit' to stop): ")

**Discussion Questions:**

* What will this program do if the user types "quit" on the first input?
* How can we count how many words the user typed before quitting?

### 4. Guess the Secret Number

secret = 7  
guess = 0  
while guess != secret:  
 guess = int(input("Guess the number: "))  
print("Correct!")

**Discussion Questions:**

* What happens if the secret number is 7 and the user enters 7 on the first try?
* How would we give the user a **hint** (“Too high” or “Too low”)?

### 5. Multiplication Table

n = int(input("Enter a number: "))  
i = 1  
while i <= 5:  
 print(n, "x", i, "=", n \* i)  
 i += 1

**Discussion Questions:**

* What output will this produce if the user enters 3?
* How can we extend the table to 10 instead of 5?