

# Lab 07 - Loops

**Direction:** Submit your typed work(s) as an upload(s) to the Labs directory of your GitHub repository or Dropbox, or in your correct Lab07 google classroom assignment. Each part should be a separate files. The files named should be "lab7A.cpp" and "lab7B.cpp" respectively.

## Part A: In class

Your objective is to write the definition of the function `OddsVEvens()` whose header is

```
string OddsVEvens(const int data[],int n)
```

Given that  $n$  represents the size of *data*, the function returns "Odds" if the sum of the odd numbers in *data* is greater than the sum of the even numbers in *data*, "Evens" if the sum of the even numbers in *data* is greater than the sum of the odd numbers in *data*, or "Draw" if the sums of the odd number and even numbers is equal. Assume that all the values of the elements of *data* are positive.

## Part B: Take home

Your objective is to write the definition of the following functions

- a. Write the definition of the function `FirstPrimes()` whose header is

```
void FirstPrimes(int primes[],int n)
```

Given that  $n$  represents the size of *primes*, the function assigns the first  $n$  prime numbers to the elements of *primes* in ascending order.

- b. Write the definition of the function `TwoSum()` whose header is

```
bool TwoSum(const int a[],const int b[],int n,int target)
```

Given that  $n$  represents the size of both *a* and *b*, the function returns true if there exists an element in *a* and an element in *b* whose values sum to *target*; otherwise, it returns false.