

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 `PrimeCount()` whose header is

```
int PrimeCount(int lo,int hi)
```

It displays the prime numbers between the absolute values of `lo` and `hi` inclusively; and then, it returns the count of those prime numbers.

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

```
void Permutation(const string& values,const int p)
```

If p is a positive integer less than the size of `values`, the function displays all the permutations of size p of the characters of `values` with repetition; otherwise, it does nothing. For instance, the function call `Permutation("rice",2)` will display the arrangements "rr", "ri", "rc", "re", "ir", "ii", "ic", "ie", "cr", "ci", "cc", "ce", "er", "ei", "ec", and "ee".