Topics:

1. Class (.h and .cpp)
2. String
3. Loop(s)
4. array
5. Defining function as const
6. Operator Overloading
7. pointers

Data: NBA-playerlist.csv

Notes:

1. The 1st row will always be the header
2. There N rows representing the data. The number of players in the .csv could change. You need to write an appropriate algorithm/approach to handle the reading of the data.

Application name: nba\_yourStudentId.cpp

This file contains your int main()

Executable file: NbaOut

Write a C++ application with the following features:

1. Able to read the contents of the given .csv file [5 marks]
   1. store the header in an array
   2. store the player’s data in a class (1 class represents 1 player)
      1. use pointer to dynamically grow the list of players
      2. do not hardcode the SIZE (# of elements)
      3. provide your own (meaningful) .h and .cpp file names
      4. implement operator+= (string name)
         1. this would function like setName
            * example: yourObjectName[index] += “Abramovic, John”
      5. implement operator+= (int FROM\_YEAR)
2. Menu [-2 marks if not implemented]

1. Display all players

2. Longest NBA career

3. Exit

1. Display All players (ascending order) [3 marks]
   1. QuickSort and based on FROM\_YEAR field
   2. Output to the console and properly formatted
   3. Output to a text file and properly formatted
      1. Filename: MyNBA.txt
2. Longest NBA Career [2 marks]
   1. The difference between TO\_YEAR and FROM\_YEAR would give you how long they played in NBA
3. Exit – stops the loop that contains the menu
4. Other requirements
   1. Proper indentation
   2. More meaningful variable names
   3. Proper use of .h and .cpp
   4. Must implement const to ensure that member variables are not accidentally changed
   5. Working Makefile
   6. Must compile

What to submit

1. All the .h and .cpp files
2. .csv file
3. Makefile

Put all the required files in 1 zip file, AS5\_yourstudentid.zip