**Refer to the documenting and submitting homework from** [**Programming Guidelines**](https://ucdenver.instructure.com/courses/347316/pages/programming-guidelines)**.**

For this assignment, you will be redefining your own MyVector class using dynamic memory allocation (dynamically allocating arrays).

This assignment requires you to use a header file, [**MyVector.h**Preview the documentView in a new window](https://ucdenver.instructure.com/courses/347316/files/4667947/download?wrap=1),  Ensure that you comment all of your code well (including your name, and more importantly how and why you are using the pointers and dynamic memory allocation to meet the requirements.)  Use the STL<vector> as your guide to what the functions are to do, but do NOT add the STL vector or the <algorithm> library.

In addition to the main.cpp, MyVector.h, MyVector.cpp you must submit a completed readme.txt file, a makefile **AND an analysis.txt** file.  In the analysis.txt file you will provide a partial asymptotic analysis.  This analysis will list the function, the Big O notation, and importantly how you determined this for each of these functions: Operator [ ], pop\_back, push\_back and search (based on constant expressions, loops, nested loops etc.).  Note that this analysis should be based on YOUR code, not something you might look up for a vector STL.