Course	**CSC 215 – Programming Techniques**
Name	**Homework 11**
Due Date	**March 27 at 12:00 (noon)**
Repository	**Place in homeworks repository**
Solution Name	**hw11.sln**
Project Files	**hw11Double.cpp**

Download hw11.zip from d2l (https://d2l.sdbor.edu) and save this to your computer.

Double click the downloaded zip file.
Highlight the contents and Press <ctrl>-C or click copy from the home tab menu

Browse to your homework repository and paste the contents there.
>   <ctrl>-V
>   Right click in the contents window and select paste
>   Click copy from the home tab menu.

Change into this folder and open hw11.sln
You will be writing your code in the hw11Double.cpp. Hw11.cpp contains the tests for your code and the doubly linked list class functions

This project uses the 64bit version only. If you are getting message the x86 is not compatible with x64 you will need to change to 64bit in the configuration manager. (Build → Configuration Manager).

Functions: There are 4 functions that you must rewrite by Tuesday at noon. You must have it pushed to your repository.
1) Remove – by value
2) Remove – by position
3) Find – search moving forward
4) Rfind – search moving backwards

Work on one function at a time. You will need to filter the tests being run by using visual studios command line options.
1) **Enter "Remove - Value*"**
2) **Enter "Remove - position*"**
   Enter "Remove*" to test both removes when both are written
3) **Enter "find*"**
4) **Enter "rfind*"**

The order of rewriting the functions can make your life easier. Do them in the order listed in functions.
Think about them. Do not drop to the command line to run the program.

You will need to delete the word "UNSORTEDDOUBLE_API" from in front of the function in the unsortedDouble.h file.
Then write the function for this function. This will execute your function rather than the function within the DLL.

Example

The first function you should write is the constructor unsortedDouble()
In the header file, delete `UNSORTEDDOUBLE_API` from the constructor prototype.
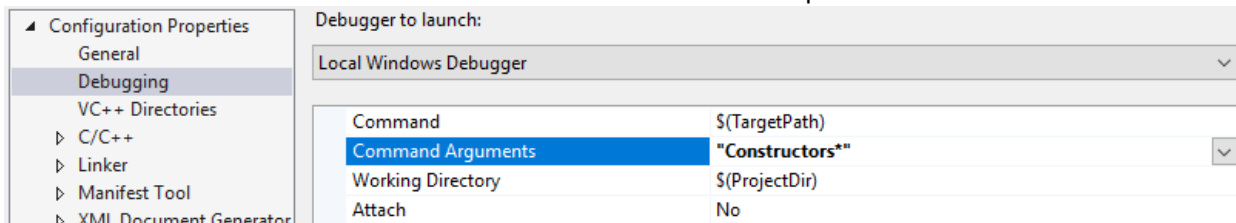Should look like the following
Before:

```
class unsortedDouble
{
    public:
        UNSORTEDDOUBLE_API unsortedDouble ();
        UNSORTEDDOUBLE_API ~unsortedDouble ();
        UNSORTEDDOUBLE_API void clear ();
        UNSORTEDDOUBLE_API void print ( ostream &out, bool forward = true,
                                        string seperator = ", ");
        UNSORTEDDOUBLE_API bool insert ( string val, int pos=1);
```

After:

```
class unsortedDouble
{
    public:
        unsortedDouble ();
        UNSORTEDDOUBLE_API ~unsortedDouble ();
        UNSORTEDDOUBLE_API void clear ();
        UNSORTEDDOUBLE_API void print ( ostream &out, bool forward = true,
                                        string seperator = ", ");
        UNSORTEDDOUBLE_API bool insert ( string val, int pos=1);
```

Place the correct filter for which tests to run in the command line options within visual studio.

Configuration Properties		Debugger to launch:	
General			
Debugging		Local Windows Debugger	⌄
VC++ Directories			
▷ C/C++		Command	$(TargetPath)
▷ Linker		Command Arguments	"Constructors*"
▷ Manifest Tool		Working Directory	$(ProjectDir)
▷ XML Document Generator		Attach	No

Now write your code in the file hw11Double.cpp

```cpp
#include "unsortedDouble.h"
#include <iostream>
#include <string>
#include <functional>

using namespace std;

// write your functions here.
|
```

You can download the documentation for each of the function from d2l.
Do not place it in the repository.
Unzip the file "Double.zip" that was downloaded. This has been updated.
Copy the directory to your desktop (Not the repository)
Open this directory and double click the index.html file.

WARNING: Be careful calling other functions. To remove from position 1, if you call pop_front, it will call your remove function and you could end up with each function calling each other.