**Deques Containers:**

// Deques are expandable arrays like Vectors (both bad at removing stuff in the middle of an array) FIFO container.

// Difference between Deques and Vectors are:

// Deques - can push things back starting at the beginning of the array container, as well as at the end. Double ended queue.

// Deques have multiple little blocks of memory that aren't sequential in memory.

// Deques have pointers for each individual block of memory.

// Vectors - can remove elements from the end (or adding a single element on the back)

// Vectors have a single sequential block of memory that when elements added to the end, it's the next block of memory available.

#include <iostream>

#include <deque>

using *std*::*deque*;

using *std*::*cout*;

using *std*::*endl*;

int main()

{

*deque*<int> myDeque(5, 0); // {0, 0, 0, 0, 0}

for (int i = 0; i < myDeque.*size*(); i++)

{

*cout* << "# " << i << ": " << myDeque[i] << *endl*;

}

// puts element with value of 10 at the back of the container, adding an index to the container.

myDeque.*push\_back*(10);

// puts element with value of 10 at the front of the container, adding an index to the container.

myDeque.*push\_front*(10);

// removes first element of array

myDeque.*pop\_front*();

// removes last element of array

myDeque.*pop\_back*();

return 0;

}