**C++ tutorial 18 – Using Vectors and Vector Functions**

https://www.youtube.com/watch?v=Cq1h1KPoGBU&list=PL318A5EB91569E29A&index=18

#include "stdafx.h"

#include <iostream>

#include <vector>

using namespace std;

int main()

{

//Format: vector<DataType> nameOfVector

//myVector.push\_back(value) ==> adds an element to the END of the vector(also resizes it)

//myVector.size() ==> returns an unsigned int equal to the number of elements

//myVector.begin() ==> reads vector from first element (index 0)

//myVector.insert(myVector.begin()+integer, new value) ==> adds element BEFORE specified index number

//myVector.erase(myVector.begin()+integer) ==> removes elements AT specified index number

//myVector.clear() ==> removes all elements in vector

//myVector.empty() ==> returns boolean value if whether the vector is empty

vector<int> myVector; //you must specify the type, like array

myVector.push\_back(3);

myVector.push\_back(5);

myVector.push\_back(9);

myVector.push\_back(1);

myVector.push\_back(99);

cout << "Vector: ";

for (unsigned int i = 0; i < myVector.size(); i++) {

cout << myVector[i] << " "; //works with or without unsigned

}

cout << endl;

myVector.insert(myVector.begin() + 3, 5);

cout << endl << "Vector: ";

for (unsigned int i = 0; i < myVector.size(); i++) {

cout << myVector[i] << " ";

}

cout << endl;

if (myVector.empty())

cout << "Is Empty!" << endl;

else

cout << "Is Not Empty" << endl;

myVector.clear();

if (myVector.empty())

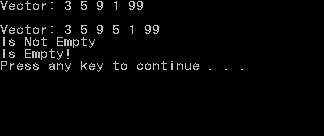
cout << "Is Empty!" << endl;

else

cout << "Is Not Empty" << endl;

}

**Result:**



**Important notes:**

To rewrite the important comments:

* Format: vector<DataType> nameOfVector
* myVector.push\_back(value) ==> adds an element to the END of the vector(also resizes it)
* myVector.size() ==> returns an unsigned int equal to the number of elements
* myVector.begin() ==> reads vector from first element (index 0)
* myVector.insert(myVector.begin()+integer, new value) ==> adds element BEFORE specified index number
* myVector.erase(myVector.begin()+integer) ==> removes elements AT specified index number
* myVector.clear() ==> removes all elements in vector
* myVector.empty() ==> returns boolean value if whether the vector is empty