*Exercise 1: Vector(create\_vector.cc)* ***Explained***

* This exercise asked us to simply test out the four pre-populated syntactical variations of initializing a vector (dynamic array) in C++ and compare the different outputs.

Text

Description automatically generated

* The first two variations admittedly did not work as I expected. I was expecting that a vector named “v” would be created, instantiated to only hold integer datatypes, pre-allocated to have 10 positions that would hold 10 different integer values (though because this array is dynamic, we can always simply add more using push\_back()), and each position would be pre-populated with the int value “5”. Instead, both of these were ways that allowed the programmer to literally just place values into each respective position of the dynamic array:
  + vector<int> v{10,5};¬
  + vector<int> v = {10,5};¬
* The following line is the only one that worked as I expected. This one created a vector named “v”, instantiated “v” to only hold only integer datatypes, pre-allocated “v” to have 10 positions that would hold 10 dif integer values (though because “v” is dynamic, we can (again) always simply add more using push\_back()), and pre-populate each of those positions to the int value “5”:
  + vector<int> v = {10,5}
* Finally, this line also didn’t work as expected. Since the first two versions essentially did the same thing using different syntax, I was sort of expecting this line to be a different way to do the same thing we just did above. Instead, it seems that this just flat-out doesn’t work! This is not allowed in C++:
* vector<int> v = {10,5}