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//COSC-120

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#include<iostream>

using namespace std;

int selectionSort(int \* arr, int length);

int main() {

int size = 0;

int \* elements = nullptr;

cout << "Enter how many elements there are (must be less than 50)" << endl;

cin >> size;

while (size > 50) {

cout << "Enter how many elements there are (must be less than 50)" << endl;

cin >> size;

}

elements = new int[size];

cout << "Enter the integers to be stored" << endl;

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

cout << "Element " << i+1 << ": ";

cin >> elements[i];

cout << endl;

}

selectionSort(elements, size);

}

int selectionSort(int \* arr, int length) {

int minIndex;

int minValue;

for (int i = 0; i < length; i++) {

minIndex = i;

minValue = arr[i];

for (int j = i + 1; j < length; j++) {

if (arr[j] > minValue) {

minValue = arr[j];

minIndex = j;

}

}

arr[minIndex] = arr[i];

arr[i] = minValue;

}

return \*arr;

}