Код:

#include <iostream>

#include <ctime>

#include <string>

using namespace std;

struct Collection

{

int elno;

int\* elements;

};

void AddToCollection(Collection& col, int element)

{

if (col.elno == 0)

{

col.elements = new int[1];

col.elements[0] = element;

col.elno += 1;

}

else

{

int\* vector = new int[col.elno + 1];

for (int i = 0; i < col.elno; i++)

{

vector[i] = col.elements[i];

}

vector[col.elno] = element;

delete[] col.elements;

col.elements = vector;

col.elno += 1;

}

}

void PrintCollection(Collection col)

{

cout << "[ ";

for (int i = 0; i < col.elno; i++)

cout << col.elements[i] << " ";

cout << "]" << endl;

}

int main(void)

{

Collection collection = { 0, NULL };

int elems;

cout << "How many elements? ";

cin >> elems;

srand(time(NULL));

for (int i = 0; i < elems; i++)

AddToCollection(collection, rand() % 100 + 1);

PrintCollection(collection);

delete[] collection.elements;

return 0;

}

Результат

