Lab 2.9.1 Simple vector manipulations

Objectives

Familiarize the student with:

- declaring and initializing one-dimensional arrays (vectors);
- using indices;
- using the **for** loop to iterate through vectors.

Scenario

Take a look at the code below - it declares two equally sized vectors. The former is initialized, the latter isn't.

We want the second vector to store the same values as the first one, but in a different order: imagine that all the values have been moved one cell to the right, while the last element has gone to the first position. We can say that the vector has been *rotated to the right*.

Warning: you must use the **for** loop for it. Don't use single assignments - they may work but they'll reflect badly on you and on your programming skills.

Once you get the expected results, play around a bit with your code: change the size of your vectors and check if your program executes properly.

```cpp
#include <iostream>

using namespace std;

int main(void) {

 int vector1[7] = {4, 7, 2, 8, 1, 3, 0};
 int vector2[7];

 // Insert your code here

 for(int i = 0; i < 7; i++)
  cout << vector2[i] << ' ';
 cout << endl;
 return 0;
}
```

Example output

```
0 4 7 2 8 1 3
```