

```
1 #include "IntVector.h"
2 #include "stdexcept"
3
4 IntVector::IntVector(const int aArrayOfIntegers[], size_t
aNumberOfElements) : fNumberOfElements(aNumberOfElements)
5 {
6     fElements = new int[fNumberOfElements];
7     for (size_t i = 0; i < fNumberOfElements; i++)
8     {
9         fElements[i] = aArrayOfIntegers[i];
10    }
11 }
12
13 IntVector::~IntVector()
14 {
15     delete[] fElements;
16 }
17
18 size_t IntVector::size() const
19 {
20     return fNumberOfElements;
21 }
22
23 const int IntVector::get(size_t aIndex) const
24 {
25     return (*this)[aIndex];
26 }
27
28 void IntVector::swap(size_t aSourceIndex, size_t aTargetIndex)
29 {
30     if (aSourceIndex >= fNumberOfElements || aTargetIndex >=
fNumberOfElements) throw std::out_of_range("Illegal vector indices");
31     int temp = fElements[aSourceIndex];
32     fElements[aSourceIndex] = fElements[aTargetIndex];
33     fElements[aTargetIndex] = temp;
34 }
35
36 const int IntVector::operator[](size_t aIndex) const
37 {
38     if (aIndex >= fNumberOfElements) throw std::out_of_range("Illegal
vector index");
39     return fElements[aIndex];
40 }
```