

The code is given below. The relevant files are `resize1d.h`.

```
template<class T>
void ChangeSize1D(T * &a, int n, int ToSize)
{
    // Change the size of the one-dimensional
    // array a to ToSize. n is the number
    // of elements in the array at present.

    // make sure new size is adequate
    if (n > ToSize) throw BadInput();

    // allocate a new array of desired size
    T *temp = new T [ToSize];

    // copy from old space to new space
    for (int i = 0; i < n; i++)
        temp[i] = a[i];

    // free old space
    delete [] a;

    // make a point to new space
    a = temp;
}
```
