**Exercise 11**

**Develop the following:**

**1.** Create a template class called *Inventory* that stores an array of *T* items and set the maximum size as you please. Make use of *std::array* instead of the old C-style array.

**2.** Add a function called *Add()* that takes in the item to add as well as which index number to use when indexing the array.

**3.** Overload the **[]** operator such that it allows the user to index an element of the array either to get or set that particular value.

**4.** Add a function called *DisplayItems()* that iterates through the array and outputs the values to the console using *std::cout*. Note that this will only work with simple data types such as *int*, *float*, or even *std::string*.

**5.** Use *assert()* where you feel it necessary to avoid invalid values being used.