CSci 2300 — Data Structures and Algorithms
Week 2, Class 3 — Solution

Exercises

1. (10 points) Add a function operator< function to the t_array template class. To think about how it should work, if it is given two arrays containing small letters of the alphabet, it should produce true if the first array would appear before the second array in the dictionary.

Solution: Your code should handle unequal length strings properly! Here’s my versions

```cpp
template <class T>
bool
t_array<T>::operator<( const t_array<T>& rhs ) const
{
    for ( int i=0; i<this->n_ && i<rhs.n_; ++i ) {
        if ( this->elements_[i] < rhs.elements_[i] )
            return true;
        else if ( rhs.elements_[i] < this->elements_[i] )
            return false;
    }
    return this->n_ < rhs.n_;  
}
```

2. Reading: Sections 3.1-3.2.6, 3.3, 3.4. Most of this should be review.