```
//  CS264_Study_Material
//  Created by Stephen O Brien on 27/11/2017.
//  Copyright © 2017 Stephen O Brien. All rights reserved.
//

 //Templates\\

#include <iostream>
#include <vector>
using namespace std;


template <typename T>
/*this is the syntax to declare a template, it uses the T as
 an object."typename" is the keyword to initiate the template and it is of type T
  which
 is versatile. */
const T& my_max (const T &a, const T &b) {

    /* all elements of the function are 'const' which means that they can not be
     changed or edited. they are
     simply used to compare.
     this function uses a ternary operator to return the element which is
     biggest.  Line 37 can be edited to compare multiple data types.
     */

    return (a<b) ? a:b;
}

int main() {

    int a = 300;
    int b = 500;


    /* the function is called here, it can be called to another data type but for
     argument sake, it is being returned to the output stream. */

    cout<<my_max(a,b)<<endl;


    return 0;
}
```