

CS 2110

Timed Lab 2

Due Date and Time

Day: Wednesday, October 8th, 2014

Time: Before the end of your lab section

Policy

Submission

TURN IN THIS ASSIGNMENT ELECTRONICALLY USING T-SQUARE. SUBMISSIONS WHICH ARE LATE WILL NOT BE ACCEPTED. EMAIL SUBMISSIONS **WILL NOT** BE ACCEPTED UNDER ANY CIRCUMSTANCES! IN ADDITION IF YOU FORGET TO HIT THE SUBMIT BUTTON YOU WILL GET A ZERO.

Questions

If you are unsure of what questions mean, the TA's will clarify them to the best of their ability. In the end you are solely responsible for what you submit. We will not be able to answer any questions about how to reach a solution to the lab questions.

What's Allowed

- The assignment files
- Your previous Homework and Lab submissions
- Your mind
- Blank paper for scratch work

What's Not Allowed

- The Internet (except the T-Square Assignment page to submit)
- Any resource on T-Square that is not given in the assignment.
- Dropbox (if your harddrive crashes we will let you retake it!)
- Notes on paper or saved on your computer.
- Textbook
- Email
- IM

- Contact in any form with any other person besides TA's
- If you have any questions on what you may not use then assume you can't use it and ask a TA.

Other Restrictions

1. You may not leave the classroom until we have verified that you have submitted the lab. If you leave the classroom without submitting you will receive a zero.
2. **YOU MUST SUBMIT BY THE END OF YOUR LAB PERIOD.** Bear in mind that the clock on your computer may be a few minutes slow. You are supposed to have a full class period to work, and we are letting you use the 10 minutes between classes to make sure you have submitted your work. **WE WILL NOT ACCEPT LATE SUBMISSIONS**, be they 1 second or 1 hour late.
3. The timed lab has been configured to accept one submission. If you accidentally submit or submit the wrong version, call one of the TA's and we will reopen submission for you. But PLEASE PLEASE PLEASE submit the right thing the first time. The TA's get busy at the end of the lab making sure everyone submitted, and it's tough doing that AND re-opening submissions for 5 students. Yes, it does happen. Don't let it happen to you.

Violations

Failure to follow these rules will be in violation of the Georgia Tech Honor Code. **AND YOU WILL RECIEVE A ZERO** and you will be reported to Bill and the Office of Student Integrity.

We take cheating and using of unauthorized resources **VERY SERIOUSLY** and you will be in serious trouble if you are caught.

Remember

1. There is a lot of partial credit given and most of it is following the directions.
2. We allow you to use your homework assignment and previous labs.
3. Please don't get stressed out during a timed lab. You have plenty of time however use your time effectively
4. Remember don't get stressed partial credit will be given. Do the best you can!
5. If you don't know something at least **TRY** do not just walk out of the lab or submit an empty file Partial credit!
6. Remember what you can and can't use if you don't know then don't use it and ask a TA if you can use it. If we catch you with unauthorized resources we will give you a zero, so better to be safe than sorry.

The assignment

In this assignment, you will be having all kinds of LC-3 assembly fun. Hooray!

We have provided a template file for you to download and fill in.

PRECONDITIONS:

The array that is passed in as a parameter to the function contains only positive integers followed by a -1. For the purposes of this problem, you are to only consider the values **preceding** the -1 entry as valid entries. The -1 is **NOT** considered to be an entry of the array you will be traversing.

The array will have at least one positive number before the -1 entry. This means that the size of the array you will be traversing will be of at least length 1.

POSTCONDITIONS:

The label MIN_VAL should contain the minimum value in the array.

The label SUM should contain the sum of all of the entries in the array.

The label LENGTH should contain the total length of the array.

Remember that -1 is the terminator to the array and therefore is **NOT** a valid minimum value, should **NOT** be added to the sum and should **NOT** increase the length of the array.

PSEUDO-CODE:

```
void traverse(int *array)
{
    int min_value = array[0];
    int sum = 0;
    int length = 0;
    int i = 0;

    while(array[i] != -1) {
        if (array[i] < min_value ) {
            min_value = array[i];
        }
        sum += array[i];
        i++;
    }
    length = i;
}
```

Deliverables

1) traverse.asm

You may submit only the files listed above. We will not accept any internet links we want the files above and only these files!

Check over your submission after you submit it. If you submit the wrong file and leave the lab I will not be happy and we will grade what you submit so please check over what you submitted after you submit it! Check your email afterward to see if you get an email from T-Square. ***Note: I will have to give zeroes to those who fail to submit the correct file, so please don't let this happen to you! I really don't like doing that!***

Have fun and good luck