**CS 1301 Principles of Programming I**

**Lab 5**

**What to hand in**

Complete the questions below. Submit the source code to BlazeView.

**Questions**

**Write a program that assigns the string “Change is inevitable” in a string variable called phrase. Print out the original string followed by**

**the length of the string**

**concatenation result of phrase with another string “, except from vending machines” (name this new string mutation1)**

**mutation1 converted to all uppercase letters (name this mutation2)**

**replacing all E of mutation2 with X (name this mutation3)**

**a substring of mutation3 that comprises of index 3 to index 29 of mutation3 (name this mutation4)**

**length of mutation4**

***//Original string: "Change is inevitable"***

***//Length of string: 20  
//Mutation #1: Change is inevitable, except from vending machines  
//Mutation #2: CHANGE IS INEVITABLE, EXCEPT FROM VENDING MACHINES  
//Mutation #3: CHANGX IS INXVITABLX, XXCXPT FROM VXNDING MACHINXS  
//Mutation #4: NGX IS INXVITABLX, XXCXPT F  
//Mutated length: 27***

**Grading Criteria**

1. 20%, present answers.
2. 20%, the programs are able to be compiled in jGRASP.
3. 20%, the programs are able to run.
4. 40%, the programs output the expected results.