

Due: 3/6/22

Answer all questions:

1. **[10 points]**. Assume values for the variables  $w$ ,  $x$ ,  $y$ , and  $z$  respectively. Your program should read values (of type integer or float) from the console into the variables.

Using SPIM, write and test a program to implement the following algorithmic operations:

**If  $(x - y) \geq w$  then**

**Set  $x$  to  $y$**

**Else:**

**Set  $x$  to  $z$**

**Endif**

**Print  $x$**

2. Write and test a program to swap the contents of two registers for each scenario described below. Your program should initially read values (of type integer, float, or string) into registers. Next, it will swap the values read, then print the final contents of each register
  - a. **[5 points]**. Assume there is only one additional register available that may be destroyed.
  - b. **[5 points]**. Assume no additional registers available that may be destroyed.

