# **Homework #4 (abc) - Three parts**

**HW\_4a**

* Write a program that asks the user to input one keyboard character.
* The program then determines if the character is an alphabetic character.
* If the character is an alphabetic character, a screen message should say so.
* If it is not an alphabetic character, then the message should say that. (See Output)

**Your program should include the following:**

1. Prompt the user to enter a keyboard character. (see output below)
2. The character entered by the user is read and the value held in a variable.
3. The program then determines whether or not the character is an alphabetic

character (a – z, or A – Z).

* Use an **if / else** control structure to determine whether or not the character is an

alphabetic character.

* The condition to be tested is whether or not the character has a numeric value within

the range of ASCII characters ‘a’ to ‘z’, or ‘A’ to ‘Z’.

* + If so, it must be an alphabetic character. Otherwise, it cannot be.

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/\* **OUTPUT**

Enter a keyboard character and press Enter: a 🡨 User enters a

The character is an alphabetic character.

Press any key to continue \*/

/\* **OUTPUT**

Enter a keyboard character and press Enter: 7 🡨 User enters 7

The character is not an alphabetic character.

Press any key to continue \*/

**HW\_4b** - Project: **Positive or Negative**

* Create a new project and name it: **Positive\_or\_Negative**
* Create a new file and name it: HW**\_4b.cpp**
* Write a program that produces the output shown, based on the following

information:

Here are some sample outputs:

**/\* OUTPUT:**

Enter a number: 7

The number you entered is a positive number.

Press any key to continue ... \*/

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Enter a number: 0

The number you entered is a zero.

Press any key to continue ... \*/

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Enter a number: -3

The number you entered is a negative number.

Press any key to continue ... \*/

**Write a program that does the following**:

The program asks the user to enter a number. The program then determines if the

number is equal to zero, or if it is a negative or positive number.

1. First, the program prompts the user to enter a numerical value. (see output)

* The user enters the number, which is read and then assigned to a variable.

1. Then the program uses and ***if else-if else control structure*** to determine

whether the number is a negative number, a zero, or a positive number.

* The result is then displayed on the screen. (see output)

**HW\_4c** - Project: **Show Menu**

* Create a new project and name it: **Show Menu**
* Create a new file and name it: HW**\_4c.cpp**
* Write a program that produces the output shown:

/\* **OUTPUT:**

MENU

1. Lobster

2. Steak

3. Turkey

4. Hamburger

5. Vegetarian Sandwich

Choose your dinner entree: 4

World's best burger.

Press any key to continue **\*/**

**Write a program**:

Write a program that first displays a list of dinner entrees, and then prompts the

user to make a selection. The selection is then printed on the screen.

* First, the program displays a lists of entrees. (See Output).
* Next, the user is prompted to enter a selection.
  + The user’s selection is read and assigned to a variable.
* Use a **switch control structure** to determine what will be displayed on the screen,

based on the user’s selection.

* Use the following information for the switch statement

1. Lobster - An excellent seafood choice

2. Steak - Top grade sirloin - the best!

3. Turkey - A Thanksgiving feast

4. Hamburger - World's best burger

5. Vegetarian Sandwich - Oh, so you’re one of those!

* + For example, if the user’s selection is 4, as shown in the output, then

World's best burger. is displayed on the screen (see output above)

**Classroom:** Staple all 3 parts of HW\_4 (4a, 4b. and 4c).

NOTE: UNSTAPLED HOMEWORK will not be accepted.

Turn in a copy of your source code and output at the beginning of the next class.

**Online class** Submit all 3 parts of HW\_4 (4a, 4b and 4c).

**SUBMIT ON CANVAS - CHECK CANVAS FOR THE DEADLINE**

(Do this for **all homework** for the entire semester.)

**IMPORTANT:** **FOR THE ENTIRE SEMESTER**, SUBMIT YOUR HOMEWORK IN A WORD

DOCUMENT, TEXT FILE OR PDF (Not an image file).