Due: September 02, 2021 (Thursday)

All programs must be correctly run for them to be considered as accepted submissions. (Per each missing- or unaccepted- submission, your grade will be lowered by one letter grade); The last day to upload the assignments is December 17.

Objective

In this assignment, you will be practicing writing cout statements and reinforcing programming standards.

Code: recipe.cpp

Input: none Output: none

Assignment: Recipe

Write a program that outputs the recipe given under the sample output with the following requirements (Use only one cout statement for each output given under each condition. i.e., you will have only three **cout**s in your program):

- 1. The first line should be
 Chocolate Chip Cookies 4 dozen cookies
- Next, output the following list of ingredients, one per line (use <u>endl</u> or <u>"\n"</u> to move the each output to a new line) -still one cout statement for this requirement.
 - 1 cup butter
 1 1 / 2 cups white sugar
 2 eggs
 2 tsp vanilla extract
 2 cups all-purpose flour
 3 / 4 baking soda
 1 / 4 tsp salt
 2 cups chocolate chips
- 3. Then, type the process. Ensure that your program does not have any statement or output sentences/ phrases that go beyond the $103^{\rm rd}$ column and wrap around (use <u>endl</u> or <u>"\n"</u> to move the each output to a new line).

Preheat oven to 350 F. In a large bowl, mix butter, sugar, eggs, and vanilla until light and fluffy. In a separate bowl, combine flour, baking soda, and salt; stir into the butter mixture until well-blended stir in chocolate chips. Drop by rounded teaspoons onto ungreased cookie sheets. Bake 8-10 minutes until just set. Cool slightly on cookie sheets before transferring to cooling racks to cool completely.

Note that there should be an empty line between the above three outputs.

Sample Output

```
Chocolate Chip Cookies  4 dozen cookies

1 cup butter
1 1 / 2 cups white sugar
2 eggs
2 tsp vanilla extract
2 cups all - purpose flour
3 / 4 baking soda
1 / 4 tsp salt
2 cups chocolate chips

Preheat oven to 350 F.In a large bowl, mix butter, sugar, eggs, and vanilla
until lightand fluffy.In a separate bowl, combine flour, baking soda, and
salt; stir into the butter mixture until well - blended stir in chocolate chips.
Drop by rounded teaspoons onto ungreased cookie sheets.Bake 8 - 10 minutes until
just set.Cool slightly on cookie sheets before transferring to cooling racks
to cool completely.

C:\Users\lasanthigamage67\source\repos\A2_Recipe\Debug\A2_Recipe.exe (process 20464) exited with code 0.
Press any key to close this window . . .
```

Procedure

- 1. Open Visual Studio:
 - a. In your start menu, find Visual Studio 2019 and click it.
- 2. Create a new project.
 - a. File→ New → Project; then the new Project window will appear.
 - b. Browse an appropriate location (Remember the Location; you need it when submitting your program for grading).
 - i. Browse and go to *Documents* folder.
 - ii. Open the folder **COSC1550** (which you created for the last assignment)
 - iii. Double click or hit the "Select Folder" button to go into the folder.
 - iv. Create another folder and name it **A2_recipe** (in the last assignment, you used **A1_helloWorld**).
 - v. Go into the folder (Double click or hit the "Select Folder" button)
 - vi. Select Folder. (the popup window should disappear now)
 - c. *Name* the project *recipe*.
 - d. Double click on "Empty Project"; The "new Project" Window will disappear now.
- 3. Add a new item (a C++ file) to the project.
 - a. From the solution explorer on the right-hand side of the screen, right-click on "Source Files" and Add → New Item...; The Add New Item window will appear.
 - b. Change the name of the file to **recipe.cpp** (for future assignments, you would use a different name here).; make sure you have one and only one .cpp in the name. (do not change the Location, it has the correct Location set under step 2)
 - c. Double click on C++ File (.cpp)
- 4. Write the program.
 - a. Type the program: For this assignment, write (i.e., type) a program that fulfills the requirement on page 1.
 - b. Make sure to add the comment block, which must be included in all your program submissions.

Note that when you type the code, the maximum line length of a source code line shall be 103 characters, including all blank characters (otherwise, the lines will be wrapped to the following line in the hard copy, making the assignment disorganized). Cleanly split longer lines to improve readability. The continued line should be indented as given in the following code.

- 5. Compile program.
 - a. Click on "Build -> compile.

If the compilation were successful, you would see something similar to the following message. Note that it has 0 failed.

```
Show output from: Build

Build started...

1>----- Build started: Project: A2_Recipe, Configuration: Debug Win32 -----

1>recipe.cpp

======== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped =========
```

If the compilation were unsuccessful, you would see a number followed by *failed*. If so, go to step 4 and check your typing, and do step 5.

- 6. Execute program.
 - a. Click on "Debug -> Start Without Debugging"; A successful program should pop up a (black) window with what you typed about yourself.
- 7. If the console does not stay; How to keep the console window open in Visual C++? Note that this requires the Console (/SUBSYSTEM: CONSOLE) linker option, which you can enable as follows:
 - a. Open up your project, and go to Solution Explorer.
 - b. Right-click on your project name.
 - c. Choose "Properties" from the context menu.
 - d. Choose Configuration Properties>Linker>System.
 - e. For the "Subsystem" property in the right-hand pane, click the drop-down box in the right-hand column.
 - f. Choose "Console (/SUBSYSTEM:CONSOLE)"
 - g. Click Apply, wait for it to finish doing whatever it does, then click OK.

Things to consider earning the full credits

Your program will be graded on:

- 1. The program must be submitted by the due date.
- 2. The program must run correctly and give an output similar to the sample output.
- 3. You must adhere to the Department style guide.
- 4. Suggestions based on some common mistakes students make in similar assignments

\cup	Use the comment block given in worldclassroom and fill it with the
	correct information (refer to pg 7 Programming Standards).
	Align the comment block information
	Fill in the description in the comment block.
	Use the correct due date - given in the assignment.
	Use white space before and after operators; << is an operator. (refer
	to pg 7 Programming Standards).
	Use white space between sections/blocks of code. (e.g., before #include
	<pre><iostream>, before the line int main(), before return statement.(refer</iostream></pre>
	pg 7 Programming Standards).
	Use four (4) spaces for indentation. (refer to pg 3 Programming
	Standards).
	No character goes beyond 103 (star line should be the longest)
	Have curly braces on their own lines. (refer to pg 3 Programming
	Standards).
	☐ Preserve the formatting of the <i>output messages</i> (i.e., the messages
	you see on the console), which improves the readability.