

Student Name:	Lab 16
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Extend the program written in class (see recorded lecture if you missed class).

- Create a subroutine that calculates Celsius from Fahrenheit.
 - Accept Fahrenheit in \$f12
 - Return Celsius in \$f0
- In the mainline:
 - Ask the user for the temperature in Fahrenheit.
 - Convert the temperature to Celsius by calling the procedure.
 - Print the temperature in Celsius.
 - In addition, print the following messages based on the temperature:
 - If Celsius is ≤ 0 , print "You could freeze water."
 - If Celsius is ≥ 100 , print "You could boil water."

Hint: You may use `c.le.s` for checking both conditions.

Example Execution:

```
Please enter temperature in Fahrenheit:214
The temperature in Celsius is 101.111115
You could boil water.
```

Example Execution:

```
Please enter temperature in Fahrenheit:32
The temperature in Celsius is 0.0
You could freeze water.
```

Example Execution:

```
Please enter temperature in Fahrenheit:72
The temperature in Celsius is 22.222223
```

The following is required for all assignments and is included in the rubric for grading:

- You need to name your file as "LastName-Lab16.asm" (Example: Talley-Michelle-Lab16.asm)
- Your program will need to have the exact output unless otherwise stated.
- Your source needs to have comments that explain your implementation.
- You need to include the following set of comments at the top of your source code for all assignments.

```
#Your Name
#Assignment # (Example: Lab #16)
```
- You need to submit your source code on blackboard.
- You may use `utils.asm`, but you must submit it with your source code.
- Please submit your files in a zip file named LastName-FirstName- InClassAss17.zip) and make sure you include any files that are used as includes in the zip file (Example: `utils.asm`).