1. When you write an if-block for idiotproofing, does the exit statement belong **before** the if-block, **inside** the if-block or **after** the if-block? Therefore, should the exit statement be indented less than the if statement, **the same as** the if statement, or **more than** the if statement?

2. The Kelvin temperature scale is very similar to the Celsius temperature scale, except that zero degrees Kelvin is **absolute zero**, the lowest physically conceivable temperature. Zero degrees Kelvin is -273.16 degrees Celsius.¹

Write a program that prompts for and inputs a temperature in degrees Kelvin, then **idiot-proofs**, then calculates the associated temperature in degrees Celsius, then outputs the temperature in degrees Celsius.

You **DON’T** have to use comments. Otherwise, all rules for Programming Projects (through PP#4) apply.

¹http://www.usatoday.com/weather/wtempcf.htm
3. **DESCRIBE THE CONDITION** of a **while** loop. (“The condition is a ...”)

4. Are the properties of the condition of a **while** loop the same as, or different from, the properties of the condition of an **if** block?

5. **WHAT ARE THE STEPS** that describe the execution of a **while** loop?
   (a)
   (b)
   (c)

6. **HOW** does a **while** loop **DIFFER** from an **if** block?
7. For each of these kinds of statements, mark **CAN** if it can appear in the body of a `while` loop, and mark **CANNOT** if it cannot appear in the body of a `while` loop. **EXPLAIN.**

(a) A named constant declaration

(b) A variable declaration

(c) A `printf` statement

(d) A `scanf` statement

(e) An assignment statement

(f) A `exit` statement

(g) An `if` block

(h) A `while` loop
8. **TRACE** the example program on slides 23 - 25 of the lecture packet titled “while Loop Lesson,” using the input values shown on slides 26 - 27. Your trace should show the following variables: `users_number`, `users_distance`, `users_last_distance` and `correct_number_hasnt_be_input`, but in the trace you can abbreviate their names as `un`, `ud`, `uld` and `cnhb`, respectively.
9. **DRAW A FLOWCHART** for the Infinite Loop program on slide 15 of the lecture slide packet titled “while Loop Lesson.”

If you use **ANY** resources other than Dr. Neeman, the TAs (Gheibi, Reynolds, Sadri, Valluru), the course textbook or the materials posted on the course webpage, you **MUST** reference them on the quiz. **THIS INCLUDES CLASSMATES, FRIENDS, PROFESSORS, ONLINE RESOURCES, ETC.**