Prog Proj 3 - Reynolds Number

Grades for this assignment come from the quiz: false  
[**Click here to go to the quiz**](https://slcc.instructure.com/courses/202748/quizzes/%7B%7B%20quiz_id%20%7D%7D)

This assignment is linked to the discussion, false. Grading will be based on posts in the topic.  
[**Click here to go to the discussion**](https://slcc.instructure.com/courses/202748/discussion_topics/%7B%7B%20discussion_topic_id%20%7D%7D)

Problem

Write a program to determine the Reynolds number for the type of fluid flowing through a pipe.

Specification

1. Complete Programming Project 6 (Fluid Mechanics), p. 230 in your text.
2. Have the program select the proper kinematic viscosity based on the temperature.
3. Print on the screen the values of velocity, pipe diameter, temperature (degrees C), and Reynolds number, with an appropriate label for each.
4. Once you verify the accuracy of the calculations, create the table as shown in a text document, then run the program once for each line of the table filling in the value for the Reynolds number. Save the document as a PDF file.
5. Create an activity diagram that depicts the decision process for selecting the correct kinematic viscosity of the fluid flow. You can easily create the document with [UMLet](http://www.umlet.com/). Save the diagram in PDF format.

Admin

1. Grading
   * 0 points if your program does not compile.
   * +5 for comments, indentation and placement of {} per [Style Guide](http://www.cs.slcc.edu/style-guide.shtml).
   * +5 for each specification met.
2. Submission: Attach your .cpp source code file and your PDF documents then submit.