

Comp 170  
Programming Assignment 4  
Test Writer and Reader  
100 Points

This assignment requires each student to write two programs, one for a teacher one for a student. The teachers program, “Test Writer”, will be used to create tests and save them to files to be administered later. The students program, “Test Taker”, will read the test file, get an answer to each question from the student and grade the test.

Three files will be submitted with this program.

1. Test Writer.cpp
  2. Test Taker.cpp
  3. Test Tags.h
- Only multiple-choice and true/false questions are allowed.
  - All Questions will appear on only one line.
  - Answers can only have one line.
  - Multiple-choice questions will be marked by the tags, <MULTIPLE\_CHOICE> and </MULTIPLE\_CHOICE>
  - Each incorrect multiple-choice answer will be preceded by a <ANSWER> tag.
  - The correct multiple-choice answer will be preceded by a <CORRECT\_ANSWER> tag.
  - True/false questions will be marked by the tags, <TRUE\_FALSE> and </TRUE\_FALSE>
  - The answer to a true false question will appear in the form of a tag on the line immediately following the question. <TRUE> or <FALSE>
  - Tags will always be on their own line. (No other text should appear on a tag line.)
  - Tags should be case sensitive.
  - The student program will number the questions in sequential order.
  - The student program will letter the answers in sequential order for multiple choice questions.
  - The multiple choice questions can have 1-26 associated answers.
  - All true/false questions will only have the choices T or F (case insensitive).
  - The “Test Writer” must let the teacher specify which answer is correct for both types of questions.
  - The “Test Writer” must allow only one correct answer per question.
  - The user interaction with the test reader should be some what similar to [Test Reader.exe](#)

#### Test File example

```
<MULTIPLE_CHOICE>
Who is the president of Harding?
<ANSWER>
Bob Hope
<ANSWER>
```

Dana Steil  
<CORRECT\_ANSWER>  
Dr. Burks  
<ANSWER>  
George Bush  
</MULTIPLE\_CHOICE>

<TRUE\_FALSE>  
Cows can fly.  
<FALSE>  
</TRUE\_FALSE>

<TRUE\_FALSE>  
Cows can moo.  
<TRUE>  
</TRUE\_FALSE>