

1. Create file **p01.cpp** in the root directory of your account for this class on the departmental computer **cs.uco.edu**.
2. Enter your author identification block consisting of
  - 2.1. Your name, for example, **Mr. Alan Turing**
  - 2.2. Your student identifier, for example, **\*00000000**
  - 2.3. You e-mail address, for example, **aturing@uco.edu**
  - 2.4. This course – **CMSC 2123 – Discrete Structures**
  - 2.5. The CRN, term, and year of the class in which you are enrolled, for example, **12599, Autumn, 2012**
  - 2.6. The project identifier – **p01**
  - 2.7. The date that the project is due, for example, **September 12, 2012**
  - 2.8. The account number of the account that you were assigned – **tt000**.
3. Design, code, and test your algorithm for producing the results of operations specified in the project assignment.
  - 3.1. Be sure to compute your results as opposed to merely printing results that you found elsewhere.
4. Download a copy of the Project Template (MS Word) from the class webpage <http://cs2.uco.edu/~trt/cs2123.html> changing the name of the file to *crn-last-first-p01.docx* where *crn* is the CRN of the class in which you are enrolled, *last* is your last name, and *first* is your first name. For example, if your name is **Alan Turing** and you are enrolled in CRN **12599**, the name of the file you downloaded is **12599-Turing-Alan-p01.docx**.
5. Complete the author identification block in the document you downloaded changing the name and other fields in the block to appropriate values.
6. Change the name in the header of the document to your name.
7. Create a new section and a new header in your document.
  - 7.1. Select the **Page Layout** tab.
  - 7.2. Select **Breaks** drop-down list.
  - 7.3. Select the **Next Page** in the Section Breaks list.
  - 7.4. In the Navigation Tab uncheck **Link to Previous**
  - 7.5. Change Cover Page to **File p01.cpp**.
8. Employ WinSCP3 that can be obtained from Dr. McDaniel's web page to copy the source file p01.cpp from your account on the departmental computer to the PC having the document that you will submit to your instructor.
9. Insert File p01.cpp into the section having the header p01.cpp.
  - 9.1. Select **Insert**.
  - 9.2. In the Text tab, select the **Object** drop-down list.
  - 9.3. Select **Text from file ...**.
  - 9.4. Navigate to the folder containing file p01.cpp.
  - 9.5. Select file p01.cpp to be inserted.
10. Submit the project to your instructor by sending the document to your instructor. The fields of your note contain:
  - 10.1. To: [trturner@uco.edu](mailto:trturner@uco.edu)
  - 10.2. Subject: *crn-last-first-p01* where *crn* is the CRN of the class in which you are enrolled, *last* is your last name, and *first* is your first name. For example, if your name is **Alan Turing** and you are enrolled in CRN **12599**, the name of the file you downloaded is **12599-Turing-Alan-p01**
  - 10.3. Attach the document containing your project template and source file.

**Creating Project p01.**

- Design code to compute all results.

For example, to show  $p \rightarrow q \equiv \neg q \rightarrow \neg p$ , you must write code to

1. Produce all possible combinations of  $p$  and  $q$ .
2. For each combination of  $p$  and  $q$ , you must find  $\neg p$  and  $\neg q$ .
3. For each combination of  $p$  and  $q$ , you must find  $p \rightarrow q$  and  $\neg q \rightarrow \neg p$  and show that both have the same value.