# Assignment 6 for CPTN230

**Name:** Pseudo Code

As always, you should read this document before doing anything else.

**References:**

* Yourself and others, but each person will produce an original document. Duplication of documents is not allowed. I don’t anticipate seeing the same design from any two people. If I do I’ll be concerned.

### Assignment Overview:

This assignment has you creating some pseudo code from a generic problem description.

You will be asked to read a program problem prose description. From that you will design the program variables and provide individual function pseudo code to describe its implementation.

### Problem Statement:

We need to create a program to manipulate a “course to instructor assignment” database. The program will prompt for the required information such as Course Name, Course Number, Assigned Instructor, Course Time and Course Location. The information will reside in a file. The information can have information (records) added, deleted, or modified. It will be possible to produce a summary display of all the records. That’s it!!!!

### Assignment Description:

First, this is not a database design course so do not design a database. You are designing a program to manipulate the database.

Second, you will not be writing a real program. You will describe the program decomposition, variables and pseudo code. I should be able to take the design and create a program to implement the design in the programming language of choice. Assume I will be using COBOL, Fortran and Pascal. I will not be using a C Family language.

The basic questions to be answered are…

* What program files are needed
* Will I be using I classes
* How many functions do I need
* What are their names
* What files will they reside in
* Will they be functions in a class
* What inputs and outputs will the functions use

With these questions answered, you can then

* Describe all the program variables
  + What are their names
  + What functions will be using them
  + Are they local or global
* Create the pseudo code for each function
  + This is step by step sequence (algorithm) of events that each function will do
  + This is not real code
  + This is not to be written in prose form

### Assignment Deliverables:

1. A Microsoft Word 2007 Document containing your write up and findings. The name of this file will be **CPTN230\_A6\_Design\_*lastname*.docx** where *lastname* is your actual last name. The format of the document is as follows. Do not deviate.

The Word document must contain the following clearly separated sections.

* Title page
  + Document name
  + Author
  + Creation Date
  + Course Number
* Table of Contents
* Introduction
* A one paragraph description of what the program does
* A file break down for the implementation
* A function breakdown
  + - Name of each function
    - One sentence description of what the function does
    - Function inputs and outputs
* Program Variables
  + - A table describing the name, purpose, scope and initial values for every variable
  + Pseudo Code
    - A sequential description of all source code, function by function
* References documented using APA format