1. What is the difference between a struct and a class? Why might you want to use one over the other? How do you access the data members for each one? Give an example of a simple struct. Also, provide a brief example of the correct method for accessing a data member for both options.

2. In the following snippets, the focus is on the use of the * and & operators. Next to each code snippet, provide a brief explanation of what the operator(s) mean for the given scenario.

   a. int *p;
   b. p = &num;
   c. void function (double &num){
       num = 4; }
   d. void function (double *num){
       *num = 4; }
   e. void function (double &num){
   f.    *num = 4; }
   g. void function (double *&array){
       //code here }
   h. void function (double **array){
       //code here }
   i. void function (const double *array){
       array[0] = 3.5; }

3. Dynamic Arrays! First, what is a dynamic array? Write the line of code to create a 1d dynamic array that allocates memory for 40 data elements of type char.

4. Now, write code (logically, ok if syntax is not 100%) for a function named create_array( ) that allocates memory for a dynamic 2d array. The function should not have any return value, and should have parameters for each dimensions size (rows and columns) as well as a parameter for the pointer to your array. What is the data type of the array parameter?

5. Extra: As a group, write the delete_teams() function to free all allocated memory from code demo example!