HW06 - Due Tue 22 March 2016 before 11:59 PM

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Use HW06 as basis to read grade information from a CSV file and compute the statistics for the class. For this assignment ignore the column header names and student names (skip over them)

1. Provide the file name on the command line
2. get the size of the data. This should give you the number of students and assignments
3. allocate sizes for your arrays and initialize them
4. read the data and store it into an array
5. bin the grades and store the binned grades in an array. You'll have to loop though all the assignments and students per assignment in this function.
6. calculate the statistics for each assignment
7. print the results

You should have no loops in *main.c*. Keep the code split between the three files as you did in the previous assignment. Your Makefile should work the same on these file. You can use my assignment as a starting point.

```c
#ifndef CLASS_STATS
#define CLASS_STATS

// structure that holds the statistics for an assignment
typedef struct
{
   int min , max, data_size;
   float mean , median , std_dev ;
} Statistics ;


// sorts the values of an array in ascending order
void sort_a (int *data , int size) ;

// calculates the mean of the elements of an array
float calculate_mean (const int *data, int size);

// calculates the variance of the emelemts of an array
float calculate_variance ( const int *data , cons int size);

// calculates the median of the elemets of an array
float calculate_median ( const int *data , const int size );

// finds the maximum value of the elements of an array
int calculate_max ( const int *data , int const size);

// finds the minimum value of the elements of an array
int calculate_min ( const int *data , const int ize);

// gets the size of the data from file.
void get_data_size(FILE *fp, int *students, int *assignments);

// gets the data from a file.
void get_data ( FILE *fp, const int students, const int assignments, int **grades);

// bin the grades
int bin_grades ( const int students , const int assignments, int **grades, int grades_scale [
      assignments][11]) ;

// get stats
void get_stats ( const int students , const int assignments, int **grades, Statistics *stats );

// print the grades
void display_grades_distribution (const int assignments , int grades_scale [cols][11] , Statistics *
      stats );

#endif
```