Problem 1: Compute the overall average grade for PIC 10A course.

Some of you may have noticed that the average grade shown on CCLE does not show the correct average calculated with the weights from our syllabus. This question asks you to compute the average grade using the correct grading scheme provided on the syllabus, i.e.,

Scheme I		Scheme II	
Homework	70%	Homework	70%
Midterm Exam	9%	Midterm Exam	0%
Final Exam	20%	Final Exam	29%
Participation*	1%	Participation*	1%
Total	100%	Total	100%

- There are 8 homework assignments in total. Two lowest grades are dropped.
- Each item's grade is between 0 and 100, so the computed average should also be between 0 and 100.
- The higher average between two grading schemes is used as the overall average.
- You need to implement two functions `read_grades` and `compute_average`.
- (25pt) `read_grades` promotes users to enter grades. You can assume users will always enter valid inputs.
- (60pt) `compute_average` returns the average grade computed from the schemes and also prints all grade items on the console, including which grade items are dropped.
- `main.cpp` is already given and it shows how we plan to use the above two functions. You are not allowed to modify `int main`.
- Here are some lines you make need to print the grades in the given format
  ```
  cout << setw(12) << right << "Homework " << [hw#] << setw(8) << [grade];
  cout << setw(13) << right << "Midterm Exam" << setw(8) << [grade];
  ```

Instructions:

- (5pt) Put all functions including `int main` into one file, named `average.cpp`, and only submit it to CCLE. Declare the ownership in the beginning of your file.

- (85pt) Implement all functions correctly. You are not allowed to use global variables. Your code should work for different inputs.

- (10pt) Write your code with good coding practices, including commenting your code, using descriptive variable names, etc.

- Code compiles with Visual Studio 2019 and solves the questions. Students may lose the majority of points if their code doesn't compile with VS 2019. Students should test their work with Apporto virtual machines if they don't have Visual Studio 2019 available on their own computer. Please manually log out your account after using the virtual machine.

  To receive full credits, the output must look EXACTLY the same as instructed above, including words, spaces, symbols, etc. Your code should not only work for the above examples, but also work for other different inputs.

Here are examples when different grades are entered.

```
Please enter homework grades 0-100: 20 20 20 100 100 100 100 30
Please enter exam grades 0-100: 50 99
Please enter participation grade 0-100: 100
   Homework 1      20 (Dropped)
   Homework 2      20 (Dropped)
   Homework 3      20
   Homework 4     100
   Homework 5     100
   Homework 6     100
   Homework 7     100
   Homework 8      30
 Midterm Exam      50 (Dropped in Scheme II)
   Final Exam      99
Participation     100
The average grade is 82.21.
```

```
Please enter homework grades 0-100: 20 100 30 90 20 10 90 70
Please enter exam grades 0-100: 100 20
Please enter participation grade 0-100: 85
   Homework 1      20 (Dropped)
   Homework 2     100
   Homework 3      30
   Homework 4      90
   Homework 5      20
   Homework 6      10 (Dropped)
   Homework 7      90
   Homework 8      70
 Midterm Exam     100
   Final Exam      20
Participation      85
The average grade is 60.5167.
```