Problem:
Write a program that will calculate a student's final score in this class based on the following dual grading system:

Scheme A	**Scheme B**
Midterm Exam 35%	Midterm exam score dropped
Final Exam 40%	Final Exam 70%
Homework 25%	Homework 30%

Assume that there will be N homework assignments total, and the lowest homework score will be dropped. The maximum of the two scores obtained from the two grading schemes will be the final score. In addition to printing the final score, you should also determine the letter grade that corresponds to the numerical average based on the following scale:

`90 <= A <= 100, 80 <= B < 90, 70 <= C < 80,  60 <= D < 70,  0 <= F < 60.`

The input and output should be exactly:

```
Please enter the midterm exam score (0 - 100):
[USER ENTERS A DECIMAL NUMBER]
Please enter the final exam score (0 - 100):
[USER ENTERS A DECIMAL NUMBER]
Please enter the number of homework assignments (3 - 7):
[USER ENTERS A POSITIVE INTEGER N]
Please enter the homework 1 score (0 - 100):
[USER ENTERS A DECIMAL NUMBER]
Please enter the homework 2 score (0 - 100):
[USER ENTERS A DECIMAL NUMBER]
            ...
Please enter the homework N score (0 - 100):
[USER ENTERS A DECIMAL NUMBER, where N is the number of homework assignments]
Your final score based on Scheme A is [OUTPUT THE SCHEME A SCORE]
Your final score based on Scheme B is [OUTPUT THE SCHEME B SCORE]
Your final score is [OUTPUT THE MAXIMUM OF THE ABOVE TWO SCORES]
Your course grade is [OUTPUT A LETTER GRADE]
```

A successful run of your code may look like:

```
Please enter the midterm score (0 - 100): 80.0
Please enter the final exam score (0 - 100): 85.0
Please enter the number of homework assignments (3 - 7): 3
Please enter the homework 1 score (0 - 100): 80.0
Please enter the homework 2 score (0 - 100): 90.0
Please enter the homework 3 score (0 - 100): 40.0
Your final score based on Scheme A is 83.25
Your final score based on Scheme B is 85
Your final score is 85
Your course grade is B
```

Hint1: For this homework, you can assume the user always input an number in the required the range, so you don't have to check if the input is valid.

Hint2: Use **for** loop to input multiple homework scores.

Hint3: Use a spare variable (e.g. lowest_hw) to keep tracking the lowest homework score. Update the variable when a lower homework score is input.

Instructions for submission:

- Name your files exactly `hw3.cpp`.
- You may not use `#include "stdafx.h"`.
- Add code description in the comment at the beginning of the file. A sample description may look like:

```
/*  PIC 10A 2A, Homework 1
    Purpose: miles to kilometers and feet converter
    Author: Hanqin Cai
    Date: 09/01/2018
*/
```

- Submit only `hw3.cpp` on BurinLearn.