Hints for Option 4 of Homework #6  
(the extra credit portion)

Create six columns of intermediate results in your "scratchpad" area as follows:

- **Column 1 - label it MinQ**
  Purpose: compute lowest quiz score, i.e., use =min(quiz range)

- **Column 2 - label it MinH**
  Purpose: compute lowest homework score, i.e., use =min(homework range)

- **Column 3 - label it Qflag**
  Purpose: compute 1 or 0 depending on whether EXTRA > MinQ, i.e., use =if(EXTRA>MinQ,1,0)
  Note that EXTRA and MinQ are actually cell references. If there is a 1 here, it means that the lowest quiz score will be replaced by EXTRA.

- **Column 4 - label it Hflag**
  Purpose: compute 1 or 0 depending on whether EXTRA > MinH and Qflag = 0
  This is a bit more complex than the previous column because 2 tests are involved, however there is a function called AND that is useful here.
  Use the following formula: =if(and(EXTRA>MinH,Qflag=0),1,0)
  If there is a 1 here, it means that the lowest homework score will be replaced by EXTRA.

- **Column 5 - label it AdjQ**
  Purpose: use Qflag to determine whether to replace the lowest quiz score with the EXTRA score, i.e., use =if(Qflag=1,quiz average with lowest replaced by EXTRA,quiz average with no replacement)

- **Column 6 - label it AdjH**
  Purpose: use Hflag to determine whether to replace the lowest homework score with the EXTRA score, i.e., use =if(Hflag=1,HW average with lowest replaced by EXTRA,HW average with no replacement)

The final adjusted score for Option 4 is: =(AdjQ + AdjH) / 2

There are other ways to do this problem. However, this approach is methodical and gives you the ability to check the correctness of each step.