

# Homework 6

CP119L 110-2

1. (textbook 6.21 in p.300) Use VLA to declare your arrays. If your compiler does not support VLA (variable-length array), then declare arrays a, b, c with pre-determined sizes, and inform the user not to input the matrix dimensions greater than the sizes.

$$C = A B, c_{ij} = \sum_{k=0}^{m-1} a_{ik} b_{kj}$$

2. (textbook 6.11 in p.297) [Hint: when you look for the smallest value in the array in part (a), use a variable to store the current "loser", and a variable to store that loser's location (index). If you do this, then you have enough information to do part (b).]
3. (textbook 6.13 in p.298)  
**Annotate the error along with ur code with //**
4. (textbook 6.14 in p.298) [Hint: store the two sets in one array and then sort the array. Design a print strategy that will have the effect of "union".]
5. Write a function `get_new_point( )` that will give us coordinates x, y, z for a point in space, by random numbers in the range of -10 to 10 (integers) for each component. You also need to write a `main()` program to demonstrate your function.