1. (3 pts) Create a function that (1) receives an integer argument that specifies the size of the array (2) creates a char array on the heap of that size (3) returns that char array to the user:

```
createCharArray(int size) {
    char* array = new char[size];
    // return array;
}
```

2. (3 pts) Create a void function that will take a char array as input, and will free all of its memory on the heap and set it to NULL after freeing memory.

```
freeCharArray(char* array) {
    delete[] array;
    array = NULL;
}
```

3. (4 pts) Which of the following correctly declares a dynamic 2d array of size x * y on the heap? Justify why the others are incorrect.

   a) int** p = new int[x][y];
   b) int** p = new int*[x];
      for(int i=0; i<x; i++)
         p[i] = new int[y];
   c) int** p;
      int d[x][y];
      p = &d;
   d) int* d = new int[y];
      int** p = new int*[x];
      for(int i=0; i<x; i++)
         p[i] = d;

4. (4 pts) Which of the following correctly removes a dynamic 2d array ‘p’ of size x * y on the heap? Justify why the others are incorrect.

   a) delete [] p;
   b) for(int i=0; i<x; i++)
      delete [] p[i];
      delete [] p;
   c) for(int i=0; i<x; i++)
      delete p[i];
      delete [] p;
   d) for(int i=0; i<x; i++)
      delete [y] p[i];
      delete [x] p;

5. Extra Credit: (1 pt) Write a main function that will ensure the user entered 2 values in as command line arguments. If not, return 1 immediately: