

NAME _____

1. Write a *recursive* function that takes two arguments like this:
void SqAll(int *L, int Size)
where L is an array of integers and Size is the size of L. SqAll must square every element of L *without using a loop!* (Hint: do the elements in reverse order.)

2. Start with the following declarations:
 fstream MyFile;
 int * A;

Allocate a new array of 100 integers. For each element of A, A[i], assign i+10 to A[i]. Write A out to MyFile in binary format. Show the open and close statements for MyFile. The name of the file should be "MyFile.bin".

3. You are given a string of the form “Some initial Text\$Some More Text”. This string is stored in the following variable, and is terminated by a null character, ‘\0’.

```
char * D[1000];
```

The string can be arbitrary, but it always has the “\$” character in the middle. Write some code that searches for the “\$” character, and copies the first part of the string to the following variable:

```
char * A[1000];
```

and the second part to the following variable:

```
char * B[1000];
```

Then copy both strings to:

```
Char *C[1000];
```

The second part (B) should come first, followed by the first part (A), and there should be nothing in between. Do not modify the array D in any way.

4. Create a class that contains an array of integers. The array will be allocated by the constructors. The default constructor will create an array with ten elements. There will be a second constructor with one integer argument that creates an array equal in size to the value of its argument. The class must have a destructor and a copy constructor. (Assignment overload is *not* needed.)

5. Given the following array, print out the array with one element per line. Use a for loop, and use a pointer to access the array values. Increment the pointer on each iteration of the loop.

```
int List[100];
```