

## HW07 Extra Credit - Dynamic Memory [+10%]

Name: \_\_\_\_\_

```
struct Item
{
    string name;
    int quantity;
    float cost;
};

const int MAX_SIZE = 50;

class ManageInventory
{
public:
    ManageInventory() : count{0}, p_pInventoryItems {new Item*[size]} { }
    ManageInventory(int size) : size{size}, count{0}, p_pInventoryItems {new
Item*[size]} { }
    ~ManageInventory();
    void addItem(string name, int quantity, float cost);

private:
    int size {MAX_SIZE};
    int count;
    Item ** p_pInventoryItems;
};
```

1. Write the definition for *addItem*. Use the new operator to dynamically create instances of type *Item*. Store pointers to inventory items in the *inventoryItems* array.
2. Write the *ManageInventory* class destructor definition. Use the delete operator to dynamically destroy all *Item* objs stored in the *inventoryItems* array.

**CS1C Summer 2019 MTWTH HW07EC +10pts Due: Th 6/27/2019**

```
cs1c@cs1c-VirtualBox ~/cs1c/hw/07ec $ script hw07ec.scr
Script started, file is hw07ec.scr
```

## HW07 Extra Credit - Dynamic Memory [+10%]

```
cs1c@cs1c-VirtualBox ~/cs1c/hw/07ec $ date
```

```
...
```

```
cs1c@cs1c-VirtualBox ~/cs1c/hw/07ec $ ls -l
```

```
...
```

```
cs1c@cs1c-VirtualBox ~/cs1c/hw/07ec $ make all
```

```
...
```

```
cs1c@cs1c-VirtualBox ~/cs1c/hw/07ec $ ls -l
```

```
...
```

```
cs1c@cs1c-VirtualBox ~/cs1c/hw/07ec $ ./hw07ec
```

```
... // instantiate manage inventory obj, add five items
```

```
cs1c@cs1c-VirtualBox ~/cs1c/hw/07ec $ exit
```

Script done, file is hw07ec.scr

```
cs1c@cs1c-VirtualBox ~/cs1c/hw/07ec $ make tar
```

```
...
```

Submit the tar package file hw07ec.tar by Thursday June 27, 2019.