Rule of Five

1. Create the following Player and Weapon classes, give them a constructor and make sure you can create them and that they have some values assigned to their members. Especially make sure the Player contains a valid instance of a Weapon.

```
#include <iostream>

#define NAME_LENGTH 32
class Weapon
{
	int m_Strength;
	float m_Speed;
};

class Player
{
	char* m_Name;
	Weapon* m_Weapon;
	int m_Health;
};
```

2. Apply the rule of five to the above classes and define the following members (make sure you do a deep copy where appropriate):
    a. A destructor
    b. A copy constructor
    c. A move constructor
    d. A copy assignment operator
    e. A move assignment operator

3. Write code to test that the above is working. You can do this by putting a std::cout in each of the above methods so that you can tell when they get called. Make sure you test:
    a. Create a Player on the stack and have it go out of scope.
    b. Create a Player on the heap and then delete it.
    c. Create a player on the heap and then create a second player as a copy.
    d. Move a player from one pointer to another.
    e. Use the assignment operators.