# HIT3329 / HIT8329 Assignment 2 Learning Guide

## Task 1
### *Class Warfare*

You needed to do two things aside from making it function as requested.
1. Use `[randomobject isMemeberOfClass:[UIView class]]` to check if it was a UIView inherited object

2. Before setting the background color, use `[randomObj respondsToSelector:@selector(backgroundColor)]` to confirm if the object has a background color property.

This second point was missed by many people. Also testing for its existence by doing this `if(!randomObject.backgroundColor)` is incorrect.

## Task 2
### *Protocol*
### Common mistakes pointed out were:
1. Your protocol needed to make sense as a protocol

2. A protocol that only contains properties/ivars should generally be a data storage class. You should include some methods, or make a better "case" for only including data fields.

3. Your protocol should have the word 'protocol', 'delegate' or something else in the name to indicate it is a protocol. The name "AddressBook" was insufficient, but "AddressBookItemDelegate" would be fine.

4. return types need to include the asterisk for proper NSObjects.

5. The protocol should be formatted as per convention (see: http://www.cocoadev.com/index.pl?FormalProtocols). Having @required/@optional statements on each line is not per convention.

## Task 3
### *Memory Management*

### You needed to:
1. Explain reference counted memory

2. Explain which common methods give ownership (alloc, new, copy, mutableCopy)

3. Explain autorelease

### Some common mistakes:

1. Garbage collection exists in ObjC, but not on the iOS platform

2. Weird statements that sounded as if they could be true, but weren't really -- less is more, fewer words
that are <u>actually correct</u> are always preferred to complex words that don't make logical sense.