

Task 2

Task

Explain what happens when the following code is executed (ARC being disabled in the compiler):

```
MyClass *myClass = [[[MyClass alloc] init] autorelease] autorelease];
```

My Answer

The app using this code is going to crash.

Why? Let's see.

1. We allocate MyClass object
2. When we allocate, retain count increases to 1
3. Then our object is initialized
4. Then we're adding our myClass object to the current autorelease pool 1st time
5. And then, 2nd time.
6. Because we've added our object to autorelease pool, it'll be released and the retain count will decrease from 1 to 0.
7. Then our object is deallocated. And there's no reference to it anymore.
8. Then, as long as we've added our object to the autorelease pool for the 2nd time, we'll release it again. The code will run as usual at this step and nothing will crash, although we might have a memory leak or something like that.
9. But then, the object is going to be deallocated again, and at this moment the app is going to crash, because we'll try to deallocate an object that we've released earlier.