

# ITC322 Assignment 1

The assignment is run by using Java or a Java IDE or Compiler to run the "TestAccounts.class" java file. All Java Documentations can be found under "/doc/", with the default/home page being "index.html" available in the "/doc" directory.

## Task 1 Discussion

The hardest section of this task was correctly implementing a unique ID, despite potentially being called at the same time and by different subclasses. I chose to use an "AtomicInteger" which has a significantly lower chance of creating two ID's at the same time, without spending days on a correct algorithm. It is safe to assume that the AtomicInteger will work as needed for the purposes of this assignment.

Other than the UID task, I had little difficulty with this section.

## Task 2 Discussion

I had no difficulty with this task. The algorithms were easy enough to construct and only required a basic understanding of the principles of java and mathematics.

## Task 3 Discussion

As with Task 2, I had little difficulty with this task. I had slight issues in properly setting out the withdraw and balance, as potential issues could arise if they deducted the transaction fee first, however this was easily fixed.

## Task 4 Discussion

I had some difficulties with this task, as I was unaware of the "instanceof" operator at first, however once I had become aware of it the majority of the task was easily accomplished.