1)

Hello everyone, my name is Wilfred Abruquah, a software engineer for turntabl. I have a bachelors degree in Computer engineering and have been working as a software engineer for three months now. I am also a graduate of TLC 6 which is a training program aimed at equipping software engineers with the necessary skills for the workplace.

I possess various skills which I believe were relevant in getting me where I am now. Notable skills I bring to the table are:

* Programming skills
* Software development
* Databases
* OOP design

At turntabl I have participated in so many projects such as an e-commerce website where I worked on the database using postgresql and a hotel management system where I worked on the backend using java.

My most notable project however was a trading system where I worked in a team to build website which would allow users to trade on various stocks available.

Life is not all work though. For fun I like to hang out at the beach and also enjoy some hobbies such as playing football.

In the near future I’m hoping to improve my skills possibly delving into the cloud computing.

2)

Arraylist and linekd list are both data structures used to store and manipulate collections of elements. However, they differ is so many ways especially in terms of performance.

* An arraylist provides faster random access than a linkedlist. Time = O(1). This is because…
* Arraylist is worse at insertions and deleting because it requires shifting elements hence time = O(1)
* Arraylist performs betteriteration over its elemnts because its elements are stored sequentially in memory.

3)

A singleton allows only one instance of a class to exist and provides a global access point to that instance.

Used when a class in your program should have only one instance such as a database.

Used to control access to global variables

How to implement

* Add a private static field to the class for storing the singleton instance.
* Declare a public static creation method for getting the singleton instance.
* Implement “lazy initialization” inside the static method. It should create a new object on its first call and put it into the static field. The method should always return that instance on all subsequent calls.
* Make the constructor of the class private. The static method of the class will still be able to call the constructor, but not the other objects.
* Go over the client code and replace all direct calls to the singleton’s constructor with calls to its static creation method.

4)

The “==’ comparator compares elements based on their memory location, checking whether both objects share the same address in memory

The “equals” however compares elements based on their contents. This means that it checks the hashcode of each element to validate whether thry are the same or not.