

LISALAB QUIZ

Time (1 hour)

1. A book is represented by a data class with these attributes: Title, Author and pages. Write a function that takes in a list of books and returns them arranged by title in reverse alphabetical order(3pts)
2. Use a do while loop to print out the squares of all the negative integers to a maximum square of 3000 (2 pts)
3. Create a class `Truck` with the following attributes: registration, totalWeight, capacity. It has the following functions:
 - a. `load(weight: Int)` - Increments the totalWeight by the weight loaded
 - b. `unload(weight: Int)` - Decrements the totalWeight by the weight unloaded
 - c. `weightCheck()` - Calculates whether the truck is under or overloaded and by how many kgs. It then returns this information i.e the state whether under or overloaded and by how much(5pts)
4. Create another class `Trailer`. It has the same functions and attributes as the `Truck` except for one attribute, `wheels: Int`. The only other difference is that the trailer's `weightCheck()` method also prints out the weight distribution per wheel in addition to the parent's functionality(5pts)