Write a Java console application that manages parts of a plane.

1) A plane is built from parts like wings, wheels, engine etc. Configuration of a parts' structure of a plane should be kept in a file (choose the best format). The structure is represented by a tree, for instance (this is just an example; names and quantities should be read from a file and the depth of the structure should be dynamic so there can be many nesting levels):
    - Plane
        - Engine (with quantity 1)
            - Bolt (with quantity 100)
            - Flywheel (with quantity 1)
            - Air Intake (with quantity 2)
        - Wing (with quantity 2)
        - Cockpit (with quantity 1)
            - Bolt (with Quantity 50)
            - …
        - …
2) Each part is represented by a unique name. The structure contains information about quantities of parts under a specific parent part. From the example above: a Bolt has quantity = 100 while placed under Engine and 50 under Cockpit.
3) When an application starts it should read information about the plane structure and be able to:
    a. Display sorted (by name) structure in a tabulated way. For example:

        Plane
            Cockpit x1
            Engine x1
                Air Intake x2
                Bolt x100
                Flywheel x1
            Wing x2

    b. Display sorted (by quantity) structure in a tabulated way, in both ascending and descending order. For example:

(Ascending order)
Plane
    Engine x1
    Flywheel x1
        Ait Intake x2
Bolt x100
Cockpit x1
    Bolt x50
Wing x2

(Descending order)
Plane
    Wing x2
    Engine x1
        Bolt x100
        Ait Intake x2
        Flywheel x1
    Cockpit x1
        Bolt x50

    c. Add new parts. For example: add Bolt with quantity 20 under Wing. For example decide what to do if Bolt is already present under Wing.
    d. Modify a structure by removing some parts. For example: Remove Engine from Plane.
    e. Change a quantity of some parts. For example: Change quantity of Bolt under Engine to 150.
    f. Display under which parts given part is present. For example: Bolt is present under Cockpit and Engine.
    g. Display a report showing total number of each part in a structure. For example:

        Plane: 1
        Bolt: 150
        Wing: 2

    h. Save all above modifications to a file that was read at the beginning.