**Tree of Cars Program**

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**Tree of Cars**  
The Java code we're looking at makes a tree that shows car brands and their models. Think of it like a family tree, but for cars. At the top, there's a "Vehicles" node, which is like the great-grandparent of all the car brands and models listed below it.

A screen shot of a computer screen

Description automatically generated

**Understanding the Tree**

Root Node: This is the starting point named "Vehicles". It's like the top of our car family tree.

Car Brand Nodes: Right under "Vehicles", we have 10 nodes (spots in the tree) for car brands like Ford, Toyota, and BMW. These are like the parents in our car family.

Car Model Nodes: Each car brand has 5 children, which are the models of cars they make, like the Ford Mustang or the Toyota Corolla. These are like the kids in the family.

So, we have 1 big family tree with 61 members in it. This includes 1 top node (Vehicles), 10 brand nodes (the parents), and 50 model nodes (the kids).

**How Tall is the Tree?**

The tree's height is 2. That means if you start from the top (Vehicles) and go down to the lowest level where the car models are, you will move down two levels.

A diagram of different types of data

Description automatically generated

A diagram of a graph

Description automatically generated with medium confidence

**What Car Brands Are There?**

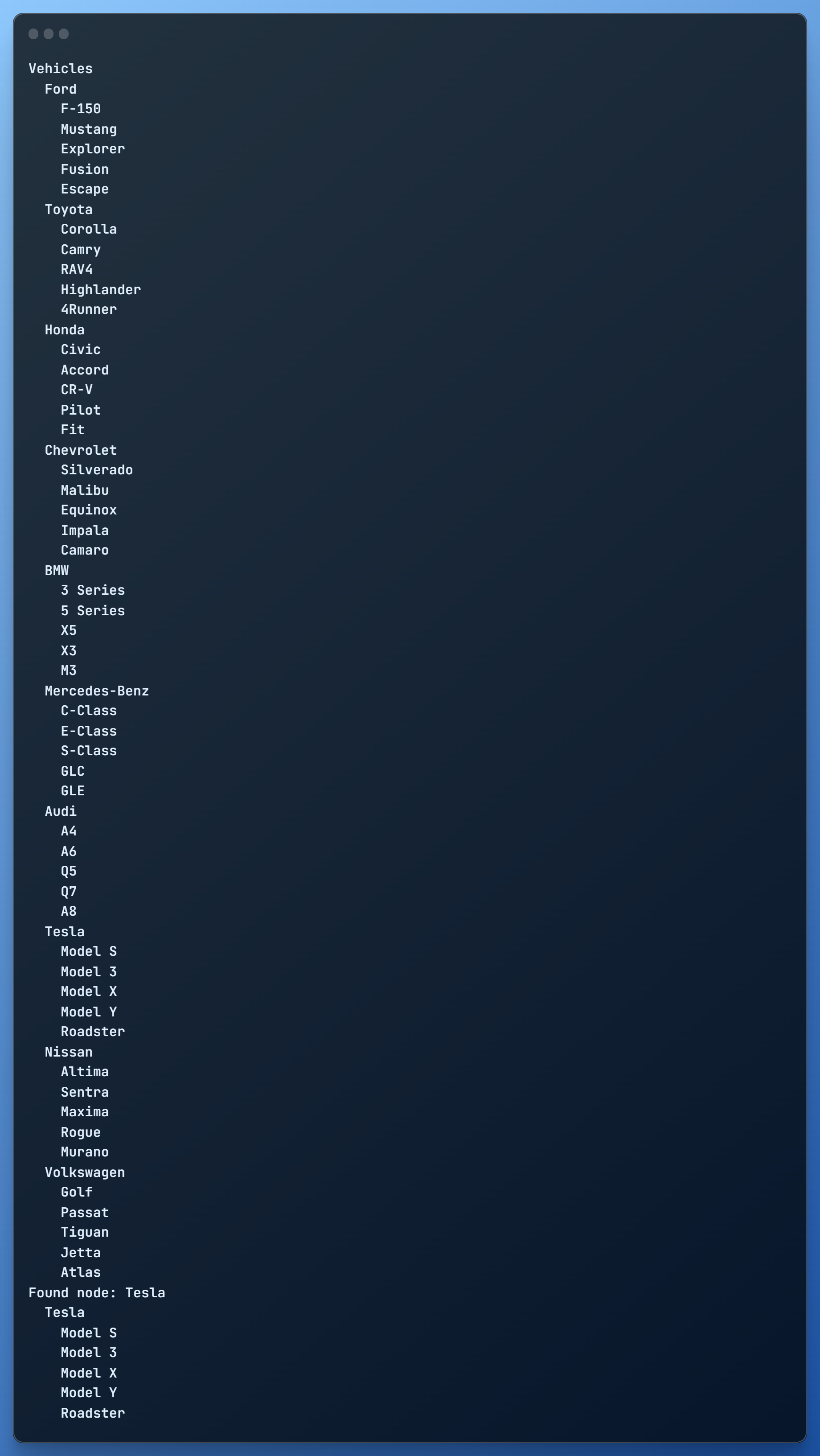
The tree includes these 10 car brands:

1. Ford
2. Toyota
3. Honda
4. Chevrolet
5. BMW
6. Mercedes-Benz
7. Audi
8. Tesla
9. Nissan
10. Volkswagen

Each of these brands has 5 car models attached to them in the tree, making it easy to see which models belong to which brand.

**Conclusion**

Think of this Java code like making a big chart that helps us see which car models come from which car brands, all starting from a single point called "Vehicles". It's a neat way to organize a lot of car info into a system where everything has its place, from the top-level "Vehicles" down to each specific car model. This tree has 61 spots in total, goes down 2 levels deep, and shows us 10 different car brands and their models.



A screenshot of a computer

Description automatically generated

A screenshot of a computer program

Description automatically generated