**Write up:**

**Car sales income monitoring system .**

**I have build the application with composite, factory , command and iterator patterns.**

I build the application with features as number of car sold area wise. I took three models of cars and checked the income generated in three areas then generate the report of sales income for the selected region. We can also see how many cars sold per are in the month , year etc. I have used Command line interface for building the application

Difficulties :

I was having some typical time when implementing the decoupling of the patterns as each pattern has to be in its own package as per the requirement.

I faced difficulty understanding the encapsulation of each pattern as there are few or more patterns that should be encapsulated according to the flow and architecture of the application.

Challenges:

I faced some challenge on how to execute the code by integrating all patterns using the decoupling method. Later I spent time on executing the application and successfully did that.

I also factory a challenge on factory pattern implementation but was easy when I understood the concept.