Problem 1

You know that each BankAccount object has attributes id, balance and rate. Use builder pattern and any extra classes and methods that you may need to realize the creation of a BankAccount type object. Create some objects and do some operations to test your classes.

Problem 2

Use prototype design pattern and classes of your choice. create an abstract class Shape and concrete classes extending the Shape class: Circle, Square and Rectangle. Define a class ShapeCache which stores shape objects in a dictionary and returns their clones when requested. Create some objects and do some operations to test your classes.