**Quiz**

**Problem-1**

1. Which class plays the role of Factory?

DataAccessFactory: It returns the concert class object.

1. Which class plays the role of Client?

Unknown: because the factory method is not called from any of the classes inside the packages.

1. Which interface plays the role of Product?

DataAccess: This interface is implemented by concret class

1. Which class plays the role of Concrete Product?

DataAccessSystem: This is concret class which implements DataAccess interface

**Problem-2**

1. Which class plays the role of Factory?

RuleSetFactory

1. Which class plays the role of Client?

AddrWindow, ProfileWindow

1. Which interface plays the role of Product?

RuleSet

1. Which class plays the role of Concrete Product?

AddressRuleSet, CustomerProfileRuleSet

Benefits of using factory patterns

- Factory Method Pattern allows the sub-classes to choose the type of objects to create.

- It promotes loose-coupling by eliminating the need to bind application-specific classes into the code. That means the code interacts solely with the resultant interface or abstract class, so that it will work with any classes that implement that interface or that extend that abstract class.

- It makes the code more maintainable as there's a single place where classes are instantiated, and each class serves a single purpose