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Date: 22/09/2021

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Question 8:

Problem : Code duplication.

Remedies : Extract Superclass

Question 4 :

In order to introduce a new type of fruit, the programmer would have to change the scoreFruit method.

SO Its violate the Open closed Principle. We know that in Open closed principle “Open for Extension, Closed For Modification”. That means existing code is not being change .

And Also

Problem : Decompose Conditional

Solution : Replace Condition With Method Call.

Question 2:

Problem : Dead Code (Pentagon)

Solution: Delete

Problem : Code Duplication in Square And Rectangle class CalculateArea().

Solution : Extract this method .

Question1:

Problem : Speculative Genarality( AnswerList class )

Solution : Collups Hiararchy or can be Deleted.

Problem : Dead code (QuestionFig class )

Solution : Delete.

Problem : StudentInfo class(Inapropriate Naming)

Solution : Naming Them Into appropriate way.

Question 5:

Solution : Abstract Factory Method (Creationation Design Pattern).

Question 3: UML Diagram.

Class

**Fubar**

Class

**Bang**

Class

**Bar**

Has-A

Extends

Inheritance

IS-A

Inplements

Interface

**Foo**