Grid

+printer(): void

+transposeMatrix():Shape[,][,]

+removeWhiteSpacesInColumns():void

+explode(): void

+explodeVerticalAndHorizantal():boolean

+explodeDiagnol(): boolean

+goesInOneDirection(): void

+process(): void

Player

name : String

totalPoint : int

+pointInHand : int

compareTo() : int

Shape

#point : int

#keyWord : String

#type : TypeOfShape

+getPoing() : int

+setShapeType() : Shape

+isEqual(): boolean

<Enumaration> TypeOfShape

Diamond,MathSign,Square,Triangle,Wildcard,Error,Empty;

+getTypeOfShape():TypeOfShape

ReadAndWrite

+write(): void

+read():_List<String>

+pullAndPushLeaderBoard(): void

+printRank():String

+printGrid(): List<String>

+readCommand():List<Player>

MathSign

+isEqual() boolean

+whatToDoBasedOnMathSign():void

Triangle

WildCard

WildCard

Square

Diamond

Extends

Extends

Extends

Extends

Extends

Extends

Extends

Report

In this assignment I have used Shape class to represent jewel objects and math signs. Shape class is an abstract class from which the other jewels and math signs extend.And also there is an enum type which is called TypeOfShape. Since there is fixed number types I have used enum type. And if any type is added to game I hcan easily integrate them to code by using enum types.Then I have used grid class to create a grid and all other related operations. ReadAndWrite class is used for obtaining needed data from files and writing results to txt files.