Report

I made the Bejeweled Game in this assignment. I use Inheritence, encapsulation, polymorphisim , and other OOP concepts for code usability, security and maintenance. In my class hierarchy, firstly I have a class to keep needed object for file IO. It is FileCreator class. Every file needed class (Output, Grid, Leaderboard, Commands) extends that class. FileCreator class provies easy to use code, and DRY. Output class is a class to write output String to “monitoring.txt” file. In Grid class I read related file to create grid and keep it in an 2D list. There are also needed methods in Grid class. In leaderboard class I read the file, and also write output. In Commands class I get given indexes and create an Iterator<Index> object for iterating. I also use Index class for indexes to use easy.

Also Every type of jewel is an instance of JewelType abstract class. Subclasses of JewelType are ClassicalJewelType (for diamon, square, triangle), WildcardJewelType (for just Wildcard), and MathematicalJewelType (for -, + , /, \, |). There are isMatcihing method in every subclass of JeweyType. That method is used to compare jewels. In Game class has a has-a relationship between needed classes Output, Grid, Leaderboard and Commands. In Main class objects are created and idealized, and run method of game is called.