**Problem Description**

To program a game of Pig, which is a jeopardy dice game in which the players take turns rolling a die and accumulating points, but their points are lost if they roll a one. The turn is also over if a player decides to “hold” in which case they save all their points.

**Major Program Components (Classes, Objects, and Methods)**

Two classes: Main which will be the driver to instantiate and run the game and then Pig which will keep track of players’ points and whose turn it is.

Main will instantiate one Pig object.

Pig Class will have a variable to keep track of the separate point values for the players, whose turn it is, and the end condition for the game.

**UML Diagram**

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| **Pig** |
| - player1\_score : int  - player2\_score : int  - is\_player1s\_turn : boolean  - die\_value : int  - at\_risk\_points : int  - die : SecureRandom |
| <<constructor>> Pig(score\_limit : int)  - takeTurn() : int  + play() : void  - isGameOver() : Boolean |