Sample high level responses to the Board Game written component

- **Describe the process that your group used to create the flowchart, from playing the game to the successful creation of a flow chart.**

Our group began by playing the game and getting familiar with it. Once we got the assignment to create a flow chart based off of it, we reflected on the step by step method that we used when we played the game. We thought about the way that we first created the tower, how we decided who was going to go in what order, the steps in choosing and pulling a block, and how the game would end; we made the basic framework of our flowchart in that order and we fleshed out those topics by creating specific commands and questions for each of those four topics.

- **Identify one point during the process in which YOU encountered a problem or a challenge. Describe the problem and your solution. Note: Writing "I fixed it" is not sufficient. I want details on how you solved it.**

During the process, I wanted to add a "Are all of the blocks used up?" question with a loop. I originally put it after the "Create groups of 3 blocks" rectangle, but I was not sure if it made sense to create groups of three blocks and then immediately ask if all the blocks were used up. I also wasn't sure if that was the best placement for it or if it would be better somewhere else. Because of this, I asked my group about it and we were debating on which location would make sense. And we wanted to keep it because we wanted a loop in the beginning. After talking about it with them, we decided to move it after the "Stack the groups" block because we believed that it made more sense to stack the groups into a tower with all of the groups than to create the groups and then ask if all of the blocks were used up.

- **Identify and describe one algorithm that exists within your flow chart.**

In the flow chart, we have a few loop algorithms, where you ask a question and depending on the answer, you can either continue through the flow or go back. One of the loop algorithms starts with the prompt "Is it your turn?". If the answer to that question is yes, then you can proceed to the rest of the flow chart and choose your block. But if the answer is no, then you are prompted to wait for your turn. At that point, it will ask if it is now your turn, and if it still is not your turn, you have to once again keep waiting. But if it is your turn the second time, then you are able to choose a block to remove and continue. We choose to use a loop algorithm for the task of waiting for your turn because when you do it in real life, every time someone finishes their turn, you have to ask yourself if it is your turn or not. If it is, then you go; if it isn't, then you don't go. Because we go through that same questioning and looping algorithm in our mind when we are playing, we chose to use that same algorithm in the flow chart.

- **Describe the process that your group used to create the flowchart, from playing the game to the successful creation of a flow chart.**

First off, our group carefully discussed a way on how to play the actual Jenga game, considering that there are many different game modes possible. After we found a solution for this problem, we began to play the game. We first chose a random person to go first, and then proceeded to take turns by going in a clockwise order. For every turn, we made sure if the tower has fallen, if not, we proceeded to continue the game, by taking turns one by one. Finally, if the tower has fallen on someone's turn, the game would end. Afterwards, we planned out a rough draft in order to fully develop our flow chart. By contributing "wise" knowledge towards it, we came out with a simple structure with information you need to play the game. We split up into groups of two, one dealing with the poster while the other works on the virtual flow chart. After we successfully finished, we revised it for spelling, grammar, and even font-size errors. Finally, we took a last glimpse on it and decided that it provided quality instructions to play the game.

- **Identify one point during the process in which YOU encountered a problem or a challenge. Describe the problem and your solution. Note: Writing "I fixed it" is not sufficient. I want details on how you solved it.**

One problem that I've encountered was the way how there were separate ways to view the gameplay of Jenga. Instead of knowing a particular way to play, we all had different ways to experience the game mode. Due to this, it would cause mass confusion for the four of us. However, we came up with a solution by making a "person take a turn to remove one block from anywhere but the top layer," afterwards, "Placing the removed block on top of the tower." This simple solution allowed us to play smoothly, also making the game entertaining.

- **Identify and describe one algorithm that exists within your flow chart.**

An example of an algorithm that exists between my flow chart would be, "Stack up blocks in alternating layers of 3 blocks each." This would be considered important since the players would participate in the activity by stacking blocks piece by piece from the instructions labeled on the back of the Jenga box. Due to this, it can also be called an abstraction, since it simplifies the steps into one phrase, instead of "executing" separate lines of repetitive instructions (ex. "Place one block on the left, another on the middle, and the last on the right. Afterwards, repeat).