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Mr. Watson

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Rock Paper Scissors - Project Outline

To begin programming, I started by creating a scanner object, as I knew that I needed to take user input. The CPU’s turn would be random, so I created a string variable to represent that, as well as a string variable for the user input. In order to validate the user’s input, I thought it would be most efficient to create an array list of all valid inputs, containing “rock” “paper” and “scissors”. I began the true code by starting a while loop, which would run until a boolean variable, running, was set to false. This boolean variable was always kept true until the user inputted “q”, which would end the loop and gracefully end the program. Next, I set the CPU variable to a random integer that was 0, 1, or 2, the same indices that the array list contained. This random number was used to randomly select an element from the list, which would thus randomly select rock, paper, or scissors. After both the CPU and user had their selection, the logic would be checked. I simply split it into 3 cases, as the user could win, the cpu could win, or they could tie. I simply used a series of if/then statements to check the case that occurred, and then printed the according output. Finally, when the user inputs “q”, the loop is broken, and a simple goodbye is granted, gracefully ending the program.