My Coding Logic (Guess_the_number_Game_ver2)

I have created two difficulties in this "Guess the Number," game, easy and hard. Easy went with the traditional style, guessing within 10 attempts which otherwise fails. Hard mode is a bit "evil" since the professor wanted me to surprise her.

The program starts off by asking the user which difficulty that they want to play with. The user chooses by typing either "easy" or "hard" in the console. I have used the "if" function to direct the user the difficulty level that they desire. And if the user made a mistake responding in the console, I have added an "if not" function which asks again to choose which difficulty.

Both of the codes mostly work the same way and have the same flow of logic. User guesses the number, and if the user fails, try again. If guessed correctly, the user wins. Regardless of the outcome, the program asks the user if he or she wants to play again. If the user responds "yes", the program restarts with a fresh new random number to guess. If "no", the program stops.

In easy mode, in order to build a function where the user is given a choice to restart or not, I have used a "def" or define function (which was honestly a pain to learn and just to make the program work/simple). Under "def", the rest works with "while" and "if" loop functions. "While" function counts the number of times the user has guessed and "if" functions indicate if the number that the user guesses is higher or lower as well as show if the player's number of attempts is full.

The hard mode works the same way as easy mode, however, I have removed the attempts and give the user a chance to quit by inputting the word "quit." which ultimately breaks the loop and ends the program. The main difference between the hard mode and easy mode is that the random integer keeps changing every time the user guesses the number. It is surely evil since there is literally a 0.1 percent chance that the user will guess correctly.

I have used a "try" function to fix the problem where the user's integer input kept crashing since the "if" function does not recognize int. Therefore, a "try" function was a way to go, including an "except" function, in case the user input something different other than an integer.