

Sports Simulation Game

You need to take our game from lecture and create subroutines and functions

- Menu() – this is a function and will only display the menu and then return the choice.
- loadPlayers() – This function will take 4 arrays. It will load the names. Randomly assign the skill and set wins and losses to 0. The function should return the number of players loaded.
- ValidateInput() – This function will take two numbers and then ask the user for input and validate if it is between low and high. It will loop until it gets a number that is between low and high and return that number.
- ViewRecords() – This subroutine will take 4 arrays, the number of players and display the records sorted by winning percentage. Display the winning percentage. $\text{Winning Percentage} = \text{wins} / (\text{wins} + \text{losses})$
- SimulateMatches() – This subroutine will take 4 arrays, the number of players and run 500 random matches and assign wins and losses.
- ChangeSkill() – This subroutine will take 2 arrays, the number of players and ask the user for their name and look them up and allow the user to change his or her skill. Use ValidateInput to assure that the user doesn't chose too low or too high a skill.
- ClearRecords() – This subroutine will take 2 arrays, the number of players and reset all wins and losses to zero.
- NewPlayer() – This function will take 4 arrays, the number of players and will return the updated number of players. The function should ask for a name and a skill and then give them a (0-0) record.

Turn in the following:

1. Your Source Code