Section A – Rock Paper Scissors [20 Marks]

Copy your assigned sample source code from the class repository into your Python environment. Look in the “Midterm” folder for the following file:

* MidtermProgramVersion1.docx
* MidtermProgramVersion2.docx

1. You will find at least two errors when you copy the sample code and try to run the program. Describe how you corrected the code to fix these errors in order to   
   make it run.

**[5 Marks]**

1. Explain what you think this program is supposed to do. Refer to specific examples in the code to provide details. Do not just rely on the title of the code file. **[5 Marks]**

1. After you have corrected the first problems to get it to run (Question 1), the program runs but it does not work properly. I.e. it does not play the game properly.
   1. Describe what is wrong with the program.
   2. Explain what you would need to do to fix this error.

**[5 Marks]**

1. The program does not work correctly if you typed something like “w” or another non-command. Explain what you would need to do to handle invalid user input. (NOTE: Just explain, you don’t need to code the solution.)

**[5 Marks]**

Section B – Guessing Game [10 Marks]

Write a guessing game program to do the following:

1. Computer chooses a random number between 1 to 10
2. Player types in his guess which is read by the program
3. The program compares the user guess to the random number
4. If the numbers match then the program prints out “You Win”
5. Otherwise the computer prints out “You Lose”
6. Make sure to follow the Python Style Guidelines
7. Make sure to add useful comments to your code
8. Write down your program on the paper provided: **[6 Marks]**
9. Extension: Modify your program to provide a hint and a second chance   
   to the player. (List (or highlight) your modifications on the paper provided.) **[4 Marks]**
   1. If the player guess is lower than the random number then   
      provide the hint “Try Again Higher”
   2. If the player guess is higher than the random number then   
      provide the hint “Try Again Lower”
   3. Read the second user guess and check for “Win” or “Lose”

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