python3 student_no.py # takes inputs from the terminal and displays results (if any).

python3 student_no.py<input1.txt # it takes inputs from input1.txt and displays the result in the terminal.

python3 student_no.py<input1.txt>myoutput.txt # it takes the inputs from input1.txt and creates the myoutput.txt document and writes the result here.

diff output1.txt myoutput.txt # compares the document output1.txt with the document myoutput.txt.

diff --ignore-all-space output1.txt myoutput.txt # compares the document output1.txt with the document myoutput.txt without ignoring the spaces.

QUESTION 1

You are tasked with creating a recursive card guessing game where the player must guess the correct card's color, suit, and rank. The card is randomly selected from a deck, and the player has a limited number of guesses to find the card.

Deck Setup:

- The deck consists of four suits: Hearts, Diamonds, Clubs, and Spades.
- Each card has a color (either "Red" or "Black")
- Rank (ranging from Ace (1) to King (13)).

The target card is randomly chosen from the deck with its color, suit, and rank.

Game Flow:

- The game will start by guessing the color and suit of the target card.
- If both the color and suit are correctly guessed, the game will move on to guessing the rank of the card.
- The player has 10 guesses to correctly guess the card. If they run out of guesses, the correct card will be revealed.
- For each guess, the system will print which card is being guessed and how many guesses are remaining.

Functionality:

- The function should first guess the color and suit. If the guess is correct, it will proceed to guess the rank.
- If the color and suit are incorrect, the function should keep trying until the color and suit are correct.
- After correctly guessing the color and suit, the function should guess the rank in each remaining attempt.
- If the rank is guessed correctly, the function should end the game, indicating the correct card.
- If the guesses run out, the function should print the correct card.

Note:def recursive_random_card_guess(target_color, target_suit, target_rank, guesses_left)

Output 1	**Output 2**
Target card: Red of Diamonds 3	**Target card: Black of Hearts 5**
Starting the card guessing game...	**Starting the card guessing game...**
Guessing Black of Diamonds, remaining guesses: 9	**Guessing Black of Clubs, remaining guesses: 9**
Guessing Black of Spades, remaining guesses: 8	**Guessing Red of Spades, remaining guesses: 8**
Guessing Red of Diamonds, remaining guesses: 7	**Guessing Red of Hearts, remaining guesses: 7**
Correct color and suit! Now guessing the rank...	**Guessing Black of Hearts, remaining guesses: 6**
Guessing rank 12, remaining guesses: 6	**Correct color and suit! Now guessing the rank...**
Guessing rank 3, remaining guesses: 5	**Guessing rank 12, remaining guesses: 5**
Correct! The card is the Red of Diamonds 3.	**Guessing rank 10, remaining guesses: 4**
	Guessing rank 13, remaining guesses: 3
	Guessing rank 6, remaining guesses: 2
	Guessing rank 6, remaining guesses: 1
	Guessing rank 7, remaining guesses: 0
	Out of guesses! The correct rank was 5.