HELLENIC MEDITERRANEAN UNIVERSITY

Electrical engineering and computer engineering
Plan driven and agile programming

Assingment

Develop a program in JAVA that simulates a simple card game. The deck consists of the cards you see in the table below

$A	$2	$3	$4	$5	$6	$7	$8	$9	$10	$J	$Q	$K
&A	&2	&3	&4	&5	&6	&7	&8	&9	&10	&J	&Q	&K
#A	#2	#3	#4	#5	#6	#7	#8	#9	#10	#J	#Q	#K
%A	%2	%3	%4	%5	%6	%7	%8	%9	%10	%J	%Q	%K

Where "$", "&", "#" and "%" are "club", "spade", "heart" and "diamond" respectively!

Out of the 52 cards, your computer (program) will need to dealt 5 random cards to two players and then print each hand's player.

Finally, the computer will check how many hearts each player has in his hand and print out the winner (the one with the most hearts).

Βοήθειες - Βήματα:

- Create an array (52 positions) named deck and initialize it as shown above. This table represents the deck
- Print the deck array to see that all the cards are there
- Create an array (5 positions) for each player named player1 and player2. These arrays represent the cards in each player's hand
- Fill the player1's array and then player2's array. Each player will have 5 random cards from the deck array.
    - To initialize a random number in the variable x from 0 to 51 use the command: x = (int) (Math.random() * 52);
- Count how many hearts each player has.
    - To find if a card is a heart use the command (suppose that s is a random String): s.substring(0,1).equals("#");
- Compare the values and print the winner with the appropriate message.
    - i.e. If the player 1 has 2 hearts and the player 2 has 4 hearts, print: "The winner is Pleayr 2 with 4 hearts!!!"
- For simplicity, consider that a shared card can be reassigned.
- Provide cooments on your code and make sure that is well-formatted.

Bonus: *(Anyone who follows and implements the following will be awarded extra points)*

- Use methods that will be called inside the main method but there must be implemented outside of the main
- Assume that a shared card, it cannot be reassigned.
- The deck array will be a two-dimensional array (4x13) and initialize it in a smart programming

way (use for, switch etc.)