Take-home test for Unit 4

Intro

In this test, you will write a program that plays a game similar to the coin-flipping game, but using cards instead of coins. Feel free to use module `cards.py` that was created in Question 4.6.

Task

Write a program called `test4.py` that plays the following card game:

1. The game starts with certain `initial` amount of dollars.
2. At each round of the game, instead of flipping a coin, the player shuffles a deck and draws **4** cards. The player gains one dollar for each **hearts** card in the drawn hand. However, if there is zero hearts in the hand, then they lose one dollar.
3. The game runs until the player either runs out of money or doubles their initial amount.

To test the game, given the `initial` amount, run it 1000 times to determine how many rounds does the game last on average.

Provide a user with an interface to enter the initial bankroll. For each entered number, the program should respond with the average duration of the game for that initial bankroll.

Example of running the program

```
Enter initial amount: 10
Average number of rounds: 14.5

Enter initial amount: 20
Average number of rounds: 29.204

Enter initial amount: 30
Average number of rounds: 43.694

Enter initial amount: 40
Average number of rounds: 57.153

Enter initial amount: 50
Average number of rounds: 72.64

Enter initial amount: 60
Average number of rounds: 87.108

Enter initial amount: 70
Average number of rounds: 100.038

Enter initial amount: 80
Average number of rounds: 114.901

Enter initial amount: 90
Average number of rounds: 129.288

Enter initial amount: 100
Average number of rounds: 143.209
```

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