Inserting a card - Solution

Task .

In this task, you need to show how a list of ordered cards changes after inserting a card from the unordered pile into the correct position. The cards should be in order from lowest to highest, where ace is considered low.

The instructions for inserting one card in the correct position can be written as:

1. Retrieve a card from the unsorted pile.
2. Make room for the card in the sorted list.
3. Insert the card into the correct position in the list.

The first one has been completed for you.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sorted cards | | | | | Unsorted pile | | |
|  |  |  |  |  |  |  |  |

**Insert** the card from the unsorted pile into the sorted cards below:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sorted cards** | | | | | **Unsorted pile** | | |
|  |  |  |  |  |  |  |  |

**Insert** the card from the unsorted pile into the sorted cards below:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sorted cards** | | | | | **Unsorted pile** | | |
|  |  |  |  |  |  |  |  |

**Describe** what you think would happen to the list above if you then wanted to insert another card, the ace of spades, after you had inserted the 9 of spades.

| The ace of spades would be inserted into the first position in the sorted cards. All the other cards in the sorted list would move along one to the right to make room for the ace of spades. |
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