

Recipe name: simple_poker

Inputs:

input_hand1, a 5-tuple of integers representing the first hand

input_hand2, a 5-tuple of integers representing the second hand

Outputs:

either 0, 1, or 2 depending on which hand wins or if there is a tie

1. Let *hand1* be an empty mapping
2. Let *hand2* be an empty mapping
3. Let *score1*, *score2*, be integers equal to 0
4. Let *current* be an integer equal to 1
5. Let *comparison1*, *comparison2* be empty sequences
6. For each *card* in *input_hand1*, do the following:
 - a. If *card* is a key in *hand1*, then
 - i. Add 1 to the value corresponding to the key *card* in *hand1*
 - b. Otherwise,
 - i. Set the value corresponding to the key *card* in *hand1* to 1
7. For each *card* in *input_hand2*, do the following:
 - a. If *card* is a key in *hand2*, then
 - i. Add 1 to the value corresponding to the key *card* in *hand2*
 - b. Otherwise,
 - i. Set the value corresponding to the key *card* in *hand2* to 1
8. If the length of *hand1* is less than the length of *hand2*,
 - a. Return 1
9. If the length of *hand2* is less than the length of *hand1*,
 - a. Return 2
10. For each *key1*, *value1* in *hand1*, do the following
 - a. If *value1* is 4, then
 - i. Add 5 points to *score1*
 - ii. $current \leftarrow 4$
 - b. If *value1* is 3, then
 - i. Add 3 points to *score1*
 - ii. If $current < 4$, then
 1. $current \leftarrow 3$
 - c. If *value1* is 2, then
 - i. Add 1 point to *score1*
 - ii. If $current < 3$, then
 1. $current \leftarrow 2$
11. For each *key2*, *value2* in *hand2*, do the following
 - a. If *value2* is 4, add 5 points to *score2*
 - b. If *value2* is 3, add 3 points to *score2*

- c. If *value2* is 2, add 1 point to *score2*
- 12. If *score1* > *score2*, then
 - a. Return 1
- 13. If *score2* > *score1*, then
 - a. Return 2
- 14. If *score1* is equal to *score2*, then
 - a. While *current* > 0, do the following
 - i. For each *key1*, *value1* in *hand1*, do the following
 - 1. If *value1* = *current*, then
 - a. Append the value *key1* to the end of *comparison1*
 - ii. For each *key2*, *value2* in *hand2*, do the following
 - 1. If *value2* = *current*, then
 - a. Append the value *key2* to the end of *comparison2*
 - iii. Sort *comparison1* and *comparison2* so that they go from the highest value to the lowest
 - iv. For each number *idx* from 0 to the length of *comparison1* – 1, do the following
 - 1. If the value at the index *idx* for *comparison1* is greater than the value at the index *idx* for *comparison2*, then
 - a. Return 1
 - 2. If the value at the index *idx* for *comparison2* is greater than the value at the index *idx* for *comparison1*, then
 - a. Return 2
 - v. Set *comparison1* and *comparison2* to empty sequences
 - vi. *current* \leftarrow *current* – 1
- 15. Return 0