451   Poker Solitaire Evaluator

Input

Standard input gets 25 cards, 5 cards per line. Each card consists of two characters. The first represents the rank of the card: 'A', '2', '3', '4', '5', '6', '7', '8', '9', 'X', 'J', 'Q', 'K'. The second represents the suit of the card: 'S', 'H', 'D', 'C'.

The cards are dealt into a 5 × 5 square. Each row and column is evaluated to determine the highest hand type for which its 5 cards qualify. The hand types, from low to high, are Nothing, Pair, Two Pair, Three of a Kind, Straight, Flush, Full House, Four of a Kind, Straight Flush. A hand qualifies only once, and then only for its highest type. For example, a Four of a Kind does not count as two pair or three of a kind.

Output

A list of 9 integers, telling how many hands of each handtype were found. from lowest to highest, being:

1. **Nothing**: does not qualify as any of the following. Example: AC, 3H, QS, JD, 7D.
2. **One Pair**: contains two cards of the same rank and does not qualify for any of the following. Example: 2C, 3H, 4H, 2H, KD.
3. **Two Pair**: contains two cards of one rank and two cards of another and does not qualify for any of the following. Example: 2C, 3H, 4H, 2H, 4D.
4. **Three of a Kind**: contains three cards of the same rank and does not qualify for any of the following. Example: QS, KH, 2C, QD, QC.
5. **Straight**: the five cards of the hand may be sorted on rank so that an unbroken sequence of 5 ranks is formed and the hand does not qualify for any of the following. Aces count high or low. That is AC, 2H, 4D, 3H, 5S forms a straight, as does JH, XD, QC, KD, AS.
6. **Flush**: the five cards are all of the same suit and the hand does not qualify for any of the following. Example: 5D, AD, KD, 7D, QD.
7. **Full House**: the hand contains three cards of one rank and two cards of another. Example: 3C, QS, QD, 3H, 3S.
8. **Four of a kind**: the hand contains four cards of the same rank. Example: AS, AD, AH, 7C, AC.
9. **Straight Flush**: the hand meets the criteria for being both a straight and a flush.

For the example below, the five rows evaluate to Straight Flush, Straight, Pair, Flush, Three of a Kind. The Five columns evaluate to Four of A Kind, Full House, Two Pair, Nothing, and Two Pair.

Sample Input

```
AS 2S 3S 4S 5S
AC 2H 3H 5C 4C
AH 2D KC KH 5D
AD 3D KD 9D 8D
XH 3C XC XS 8C
```

Sample Output

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1, 1, 2, 1, 1, 1, 1, 1, 1, 1
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