

Problem 4 – Straight Flush

Nakov loves to play [poker](#), but unfortunately, he does not know when he has a strong hand. One of the strongest hands in poker is **Straight Flush**: a sequence of 5 consecutive cards of the same suit. The poker game uses a **standard deck of 52 cards**. The card faces in increasing order are: **2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K** and **A**. The cards suits are denoted by the letters **S** (spades), **H** (hearts), **D** (diamonds) and **C** (clubs).

Help Nakov to make some money for food! Write the program that check if his hand holds one or more Straight Flushes.

For example, the hand "9D, 2S, 10D, AD, 10H, JD, QD, KD" contains two Straight Flushes: [9D, 10D, JD, QD, KD], [10D, JD, QD, KD, AD].

Note: The A can be only after K, not before 2.

Input

The input comes from the console as a **single line, holding the hand of cards**, separated by comma and space between each two cards. The input cards are **unique** (there are **no duplicates**). The input data will always be valid and in the format described. There is no need to check it explicitly.

Output

- If there are Straight Flushes – print them, each at a new line in format [card1, card2, card3, card4, card5]. The **ordering** of the output lines is not significant (the Straight Flushes can be ordered in arbitrary way).
- If no Straight Flushes exist among the given cards, print a message "No Straight Flushes".

Constraints

- The **count** the cards will be in the range [1...52].
- The **card faces** will be one of the following values: [2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K, A].
- The **card suits** will be one of the following values: [S, H, D, C].
- Time limit: 0.3 sec. Memory limit: 16 MB.

Examples

Input	Output
9D, 2S, 10D, AD, 10H, JD, QD, KD	[9D, 10D, JD, QD, KD] [10D, JD, QD, KD, AD]
AS, KH, 10C	No Straight Flushes
2S, 2C, 2D, 2H, AS, KH, 10C	No Straight Flushes
5H, AS, 10C, 8H, KS, KH, KD, 9H, JH, QS, 3H, QD, 4H, QH, 8S, 10D, 6H, 10S, 10H, 7C, JD, JS, 2H, 7S, 7D	[8H, 9H, 10H, JH, QH] [9H, 10H, JH, QH, KH] [10S, JS, QS, KS, AS] [2H, 3H, 4H, 5H, 6H]