

Q1: test_name_matching

My solution is **[D-Q].***

[D-Q] matches a single character in the range between D and Q

. matches any character (except for line terminators)

***** matches the previous token between zero and unlimited times, as many times as possible, giving back as needed (greedy)

➤ *Assumptions:*

Since all example names that are matched start with an upper-case letter in the range between D and Q, and all unmatched strings start with a character that is not in the range between D and Q, ***I assume that all people's names start with a letter from D to Q.*** For the rest of the characters, I just need to match any character between zero and unlimited times.

➤ *Fail cases:*

- 1) when the first character of people's full name is not in the range between D and Q, like 'Zoey Lee', my solution will fail. (It will only match 'Lee' for 'Zoey Lee')
- 2) when single names start with upper letter character in the range between D and Q, like 'Marry', my solution will fail.
- 3) when non-name strings start with upper letter character in the range between D and Q, like 'Merry Christmas' and 'Fail cases', my solution will fail. (It matches them wrongly as a people's full name)

Q2: test_gerunds_matching

My solution is **\b\w{2,6}ing**

\b assert position at a word boundary

\w matches any word character (equivalent to [a-zA-Z0-9_])

{2,6} matches the previous token between 2 and 6 times, as many times as possible, giving back as needed (greedy)

ing matches the characters ing literally (case sensitive)

➤ *Assumptions*

1. All words that end with 'ing' are gerunds.
2. For all gerunds, the number of character before 'ing' is between 2 and 6.

➤ *Fail cases:*

- 1) Some words end with 'ing' but are not gerunds. For those type of word, my solution will wrongly match them as gerunds.
 - 'that usually happens in the evening'(my solution match 'evening')
 - 'she prefers wearing one earring'(my solution match 'wearing' and 'earring', the first one is right, but the last one is wrong)
- 2) When token before 'ing' is not between 2 and 6 times, my solution won't match any gerunds. For example: 'he is bargaining with her'(my solution won't match anything, but 'bargaining' is a gerund with 7 character before 'ing')