## In [1]: pip install fuzzywuzzy

Requirement already satisfied: fuzzywuzzy in c:\users\admin\anaconda3\lib\si te-packages (0.18.0)

Note: you may need to restart the kernel to use updated packages.

## In [2]: from fuzzywuzzy import fuzz import random

C:\Users\Admin\anaconda3\Lib\site-packages\fuzzywuzzy\fuzz.py:11: UserWarnin
g: Using slow pure-python SequenceMatcher. Install python-Levenshtein to rem
ove this warning

warnings.warn('Using slow pure-python SequenceMatcher. Install python-Leve nshtein to remove this warning')

```
# Define anime recommendations for each genre
In [3]:
         anime recommendations = {
             "action": ["Attack on Titan", "My Hero Academia", "One Piece", "Naruto", 'adventure": ["Fullmetal Alchemist: Brotherhood", "Hunter x Hunter", "One
             "comedy": ["One Punch Man", "Gintama", "Konosuba", "Nichijou", "The Devil
             "drama": ["Your Lie in April", "Clannad", "Anohana", "Violet Evergarden", "fantasy": ["Sword Art Online", "Attack on Titan", "Fullmetal Alchemist: E
             "sci-fi": ["Steins; Gate", "Cowboy Bebop", "Neon Genesis Evangelion", "Ghos
             "slice of life": ["K-On!", "Barakamon", "Hyouka", "March Comes in Like a L
         }
         casual={'how are you?':'I am working fine, so I guess I am alright! How about
                  'i am ok,fine': 'Thats nice to know',
                  'what is your name?': 'My name is Ruka',
                  'who are you': 'I am Ruka. I am an anime suggesting chatbot',
                  'what can you do?': 'I am an anime suggesting chatbot. I can recommend
         # Function to find the closest match for genres
         def find_closest_genre(user_input):
             matches = []
             for genre in anime recommendations.keys():
                 ratio = fuzz.ratio(user input, genre)
                 if ratio > 70: # Adjust threshold as needed
                      matches.append((genre, ratio))
             if matches:
                  closest_match = max(matches, key=lambda x: x[1])[0]
                  return closest match
             else:
                 return None
         def suggest_anime(genres):
             recommendations = []
             for genre in genres:
                 closest genre = find closest genre(genre)
                 if closest_genre:
                      recommendations.extend(anime_recommendations[closest_genre])
             return recommendations
         def suggest():
             while True:
                 print('Ruka: Enter your preferred genres (comma-separated): ')
                 user input = input("You: ").lower()
                 user_genres = [genre.strip() for genre in user_input.split(",")]
                 recommendations = suggest anime(user genres)
                 if recommendations:
                      print("\nRuka: Here are some anime recommendations for you:")
                      for recommendation in random.sample(recommendations, min(len(recommendations))
                          print("-", recommendation)
                 else:
                      print("\nRuka: Sorry, I couldn't find any recommendations for the
                 continue chat = input("\nRuka: Would you like more recommendations? \r
                 while continue chat not in ('y', 'n', 'no', 'yes'):
                      continue_chat = input("\nRuka: Could'nt understand you. \n Would y
                 if continue chat not in ('y', 'yes'):
                      print("Ruka: Have a nice day! See you again later!")
```

```
break
    return
def chating(inp):
    if 'recom' in inp or 'sug' in inp:
        print("Ruka: SURE!!")
        suggest()
        return True
    if 'hi' in inp or 'hey' in inp or 'hello' in inp:
        print('Ruka: ',random.choice(["Hello!", "Hi there!", "Hey!", "how you
        return False
    matches = []
    for chat in casual.keys():
        ratio = fuzz.ratio(inp, chat)
        if ratio > 50: # Adjust threshold as needed
            matches.append((chat, ratio))
    if matches:
        closest match = max(matches, key=lambda x: x[1])[0]
        print('Ruka: ',casual[closest_match])
        return False
    else:
        print("Ruka: I could'nt quite undersand you. Can you rephrase the sent
while True:
    inp=input('You: ').lower()
    if chating(inp): break
```

```
You: hiii
        Ruka: Hey!
        You: hello
        Ruka: how you doin?
        You: how are you
        Ruka: I am working fine, so I guess I am alright! How about you?
        You: what is your name
        Ruka: My name is Ruka
        You: what can you do
        Ruka: I am an anime suggesting chatbot. I can recommend you animes based on
        your favourite genres.
        You: recommend mi an anime
        Ruka: SURE!!
        Ruka: Enter your preferred genres (comma-separated):
        You: action, comedy, adventure
        Ruka: Here are some anime recommendations for you:
        - Naruto
        - One Piece
        - One Piece
        - Nichijou
        - Fullmetal Alchemist: Brotherhood
        Ruka: Would you like more recommendations?
        You: (yes/no)yes
        Ruka: Enter your preferred genres (comma-separated):
        You: recommend me anime
        Ruka: Sorry, I couldn't find any recommendations for the specified genres.
        Ruka: Would you like more recommendations?
        You: (yes/no)yes
        Ruka: Enter your preferred genres (comma-separated):
        You: slice of life,adventure
        Ruka: Here are some anime recommendations for you:
        - Attack on Titan
        - Fullmetal Alchemist: Brotherhood
        - Hunter x Hunter
        - Naruto
        - Barakamon
        Ruka: Would you like more recommendations?
        You: (yes/no)no
        Ruka: Have a nice day! See you again later!
In [ ]:
```