CHATBOT USING NLTK

import random

import nltk

#import chatbot1

from nltk.chat.util import Chat, reflections

disease\_data = {

"diabetes": {

"symptoms": "Frequent urination, increased thirst, unexplained weight loss, fatigue",

"causes": "Insufficient production of insulin or inability to properly use insulin",

"treatment": "Lifestyle changes, medication, insulin therapy"

},

"cancer": {

"symptoms": "Unexplained weight loss, fatigue, lumps, changes in skin, persistent cough",

"causes": "Genetic mutations, environmental factors, lifestyle choices",

"treatment": "Surgery, chemotherapy, radiation therapy, immunotherapy"

},

"asthma": {

"symptoms": "Shortness of breath, wheezing, chest tightness, coughing",

"causes": "Environmental factors, allergies, genetics",

"treatment": "Inhalers (bronchodilators, corticosteroids), avoiding triggers"

},

"alzheimer's disease": {

"symptoms": "Memory loss, confusion, difficulty in problem-solving, mood swings",

"causes": "Combination of genetic, lifestyle, and environmental factors",

"treatment": "Medication, therapy, lifestyle modifications"

},

"heart disease": {

"symptoms": "Chest pain, shortness of breath, fatigue, irregular heartbeat",

"causes": "High blood pressure, smoking, high cholesterol, obesity",

"treatment": "Lifestyle changes, medication, surgery"

}

}

pairs = [

(r'hi|hello|hola|wassup|namaste', ['Hello! How can I assist you today?']),

(r'what are the symptoms of (.\*)\??', [disease\_data[disease.lower()]["symptoms"] for disease in disease\_data]),

(r'what causes (.\*)\??', [disease\_data[disease.lower()]["causes"] for disease in disease\_data]),

(r'what are the treatment options for (.\*)\??', [disease\_data[disease.lower()]["treatment"] for disease in disease\_data]),

(r'bye|goodbye|exit|quit', ['Thank you for using the chatbot. Take care!']),

(r'.\*', ["I'm sorry, I don't have information on that disease."])

]

def chatbot():

print("Welcome to the disease information chatbot! How can I assist you?")

chat = Chat(pairs, reflections)

chat.converse()

chatbot()