**LAB 08**

**Introduction to AI. Chatbots**

**Lab Tasks/Practical Work**

1. Try some chatbot based applications and check how they work. Make a questionnaire about yourself and get response from AI based chatbots before and after providing your information.

Code

import nltk

from nltk.chat.util import Chat, reflections

nltk.*download*('punkt')

pairs = [

    [

*r*"My name is (.\*)",

        ["Your name is Musadiuqe Hussain."]

    ],

    [

*r*"What do you do?",

        ["You are a student studying Software Engineering at NED University."]

    ],

    [

*r*"What are your hobbies?",

        ["You like to play video games and listen to music."]

    ],

    [

*r*"What is your favorite food?",

        ["Your favorite food is cheese burger and butter chicken."]

    ],

    [

*r*"What are your future plans in terms of your degree?",

        ["You would love to apply for master's programs in countries like the Netherlands."]

    ],

    [

*r*"What's your favorite show?",

        ["Your favorite show is Breaking Bad; it's the best show I have ever seen."]

    ],

    [

*r*"Which languages would you love to learn?",

        ["You are a huge fan of the Spanish language and would love to be more fluent in it."]

    ],

    [

*r*"What's your favorite movie?",

        ["Your favorite movie is Shutter Island."]

    ],

    [

*r*"Are you a morning person or a night owl?",

        ["You used to be a morning person, but now You have become a night owl."]

    ],

    [

*r*"hi|hello|hey",

        ["Hello! How can I assist you today?"]

    ],

    [

*r*"exit",

        ["Goodbye! Have a great day!"]

    ]

]

chatbot = *Chat*(pairs, *reflections*)

*def* **run\_chatbot**():

*print*("Welcome to the chatbot! Type 'exit' to end the conversation.\n")

    while True:

        user\_input = *input*("You: ")

        if user\_input.*lower*() == "exit":

*print*("Chatbot: Goodbye! Have a great day!")

            break

        response = chatbot.*respond*(user\_input)

        if response:

*print*("Chatbot:",response)

        else:

*print*("Chatbot: I'm not sure how to respond to that.")

*run\_chatbot*()

**Output**

