5.Demonstration of supervised learning algorithms.

<https://www.toptal.com/machine-learning/supervised-machine-learning-algorithms>

<https://builtin.com/data-science/supervised-learning-python>

6.Demonstration of reinforcement learning

<https://pythonprogramming.net/q-learning-reinforcement-learning-python-tutorial/>

7. Design an Artificial Neural Network by implementing the Back propagation algorithm and test the

same using appropriate data sets.

<https://machinelearningmastery.com/implement-backpropagation-algorithm-scratch-python/>

8. Implementation of simple chatbot

<https://dzone.com/articles/python-chatbot-project-build-your-first-python-pro>

<https://www.edureka.co/blog/how-to-make-a-chatbot-in-python/>

9.Demonstration of the following operations on text data.

a. Removal of punctuations in the given string.

<https://scanftree.com/programs/python/python-program-to-remove-punctuations-from-a-string/>

b. Generation of string tokens

<https://betterprogramming.pub/best-practices-for-generating-secure-passwords-and-tokens-in-python-ebb91d459267>

10.Demonstration of the following operations using NLTK.

<https://www.datacamp.com/community/tutorials/text-analytics-beginners-nltk>

a.Removal of stop words for a given passage from a text file

<https://www.analyticsvidhya.com/blog/2019/08/how-to-remove-stopwords-text-normalization-nltk-spacy-gensim-python/>

b.Stemming for a given sentence

[https://www.pythonprogramming.in/stemming-list-of-sentences-words-or-phrases-using-nltk.html#:~:text=Stemming%20is%20a%20process%20of,classify%20or%20cluster%20the%20text](https://www.pythonprogramming.in/stemming-list-of-sentences-words-or-phrases-using-nltk.html%23:~:text=Stemming%20is%20a%20process%20of,classify%20or%20cluster%20the%20text)

c.POS tagging for a given sentence to classify text data

<http://www.nltk.org/book/ch05.html>