AI - Assignment 4| Mohammad Faizan Haider 2020083

Preparing the Data -

- Read using pandas
- Omitted a few columns that were reducing the accuracy of the model
- Clustered different jobs into same classes to decrease the total number of classifications
- Description generated to calculate mean and percentile
- Normalizing data

Experiments -

- Dropped various permutations of columns to generate the highest accuracy of the model
- Varied the number of perceptrons per layer to optimize the results
- Occupations with the same logical outlook were clubbed together to maintain a sense of realism.
- The number of groups varied as well and a general trend that was visualized was that as the number of groups decreased, the accuracy of the model increased, and vice versa.

Analysis of the obtained results

- The accuracy of the model was around 60% overall.
- More accuracy can be achieved by increasing the number of perceptrons in the neural network.
- It can also be increased by adding more rows of data for the model to learn from.

Relation to Assignment 1

Assignment 1 asked us to do a career recommendation system, while this assignment asked us to predict the career of a person given his marks and other personality traits. Even though both of them appear different, they are pretty similar. Both of them have a facts-based system for their engines to work and predict/recommend the result.