Name: Kelvin J Anil Reg No: 21BCE0002

AI ML Assignment 1

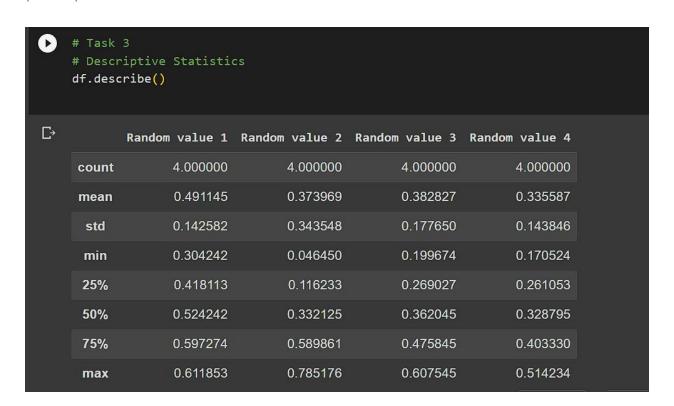
Colab Link:

https://colab.research.google.com/drive/1xRUetGZ2_ZuWBs39FW 7e4pRrTBPpM07k?usp=sharing

Task - 1 | Create a pandas dataframe (DataFrame name as 'df') with numpy random values (4 features and 4 observation)

Task - 2 Rename the task - 1 'df' dataframe column names to 'Random value 1', 'Random value 2', 'Random value 3' & 'Random value 4'

```
[18] # Task 2
     # Renaming the columns
     df.columns=['Random value 1', 'Random value 2', 'Random value 3', 'Random value 4']
     df
         Random value 1 Random value 2 Random value 3 Random value 4
                0.304242
                                0.524756
      0
                                                0.431945
                                                                 0.291229
                0.611853
                                0.139494
                                                                 0.366362
      1
                                                0.292145
      2
                0.456070
                                0.785176
                                                0.199674
                                                                 0.514234
                0.592415
                                0.046450
                                                0.607545
                                                                 0.170524
      3
```



Task - 4 Check for the null values in 'df' and find the data type of the columns.

```
[20] # Task 4
    # Check for null values in df
    df.isnull().sum()
    Random value 1
                     0
    Random value 2
                   0
    Random value 3
                    0
    Random value 4
                    0
    dtype: int64
# Find the datatype of columns
    df.dtypes
 Random value 1 float64
    Random value 2
                    float64
                    float64
    Random value 3
    Random value 4
                    float64
    dtype: object
```

Task - 5 Display the 'Random value 2' & 'Random value 3' columns with location method and index location method.

```
[27] # Task 5
    # Display Random value 2 columns with location method
    df.loc[:,'Random value 2']
    0 0.524756
    1 0.139494
    2 0.785176
        0.046450
    Name: Random value 2, dtype: float64
 0
   df
₽
        Random value 1 Random value 2 Random value 3 Random value 4
              0.304242
                             0.524756
     0
                                             0.431945
                                                            0.291229
     1
              0.611853
                             0.139494
                                             0.292145
                                                            0.366362
     2
              0.456070
                             0.785176
                                                            0.514234
                                             0.199674
     3
                                                            0.170524
              0.592415
                             0.046450
                                             0.607545
```

```
[29] # Display Random value 3 columns with location method
     df.loc[:,'Random value 3']
     0 0.431945
        0.292145
     1
     2
        0.199674
         0.607545
     Name: Random value 3, dtype: float64
 # Display Random value 2 columns with index location method
     df.iloc[:,1]
 C→ 0 0.524756
         0.139494
     2
        0.785176
         0.046450
    Name: Random value 2, dtype: float64
```

```
[35] # Display Random value 3 columns with index location method
    df.iloc[:,2]

0    0.431945
    1    0.292145
    2    0.199674
    3    0.607545
    Name: Random value 3, dtype: float64
```