import pandas as pd
nums=pd.Series([1,2,3,4])
nums.index=['a','b','c','d']
df=pd.DataFrame(lst) # lst is a numpy list
df[2] # Get the Column with Column Name 2
df.columns=['A','B'] # Set the column Names
df.shape
df.head(n=3) #Get the top 3 Rows
df.tail(n=3) # Last 3 Rows
df[['A','B']] #Extracting multiple Columns
df['A+B']=df['A']+df['B'] #Add a new Column with is a result of operations on other columns
df.drop(columns=['A+B']) #Drop a column
df.index=['P','Q','R','S'] #Changing the Row Name
df.loc['P'] #Extract Row 'P'
df.iloc[-2:] #Extract the Row by index not by RowName
df.iloc[[0,1,4]] #Extract Multiple Rows
df.iloc[0][['A','B']] #Extract A and B Column of First Row.
mask=df['B']>30 #Mask Creation
df[mask] #Extract Rows with Column B value >30
dfArray=df.value #Convert DataFrame into numpy matrix
df.dropna() #Droping all the Rows with Nan values
df['B']=df['B'].fillna(value=10) #Fill the Nan value in B column with Number 10.
pd.concat([df1,df2]) #Concat df1 and df2 DataFrames
df1.merge(df2,how='inner') #Inner Join df1 & df2
df1.merge(df2,how='outer') #OuterJoin df1 & df2
df1.merge(df2,how='left') #LeftOuterJoin df1 & df2
df1.merge(df2,how='right') #RightOuterJoin df1 & df2
df=pd.read_csv("./xyz.csv") #Read a csv file
df.desribe() #Get all the aggregate values for each column

df['species'].nunique() #Count of Unique names in Species Column
df['species'].unique() #Name of Unique names in Species Column
df.sort_values(by=['Sepal','Petal']) #Sort the Data by Sepal colmn and if 2 rows have the same sepal value then sort on the basis of Petal value
df['species'].apply(func) #Apply a function to the species Column of the DataSet
df.groupby('species') #Group the data according to the species column