HOPE ARTIFICIAL INTELLIGENCE

INTERNSHIP

TEAM MEMBERS

1)VIHAS

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MACHINE LEARNING PROJECT

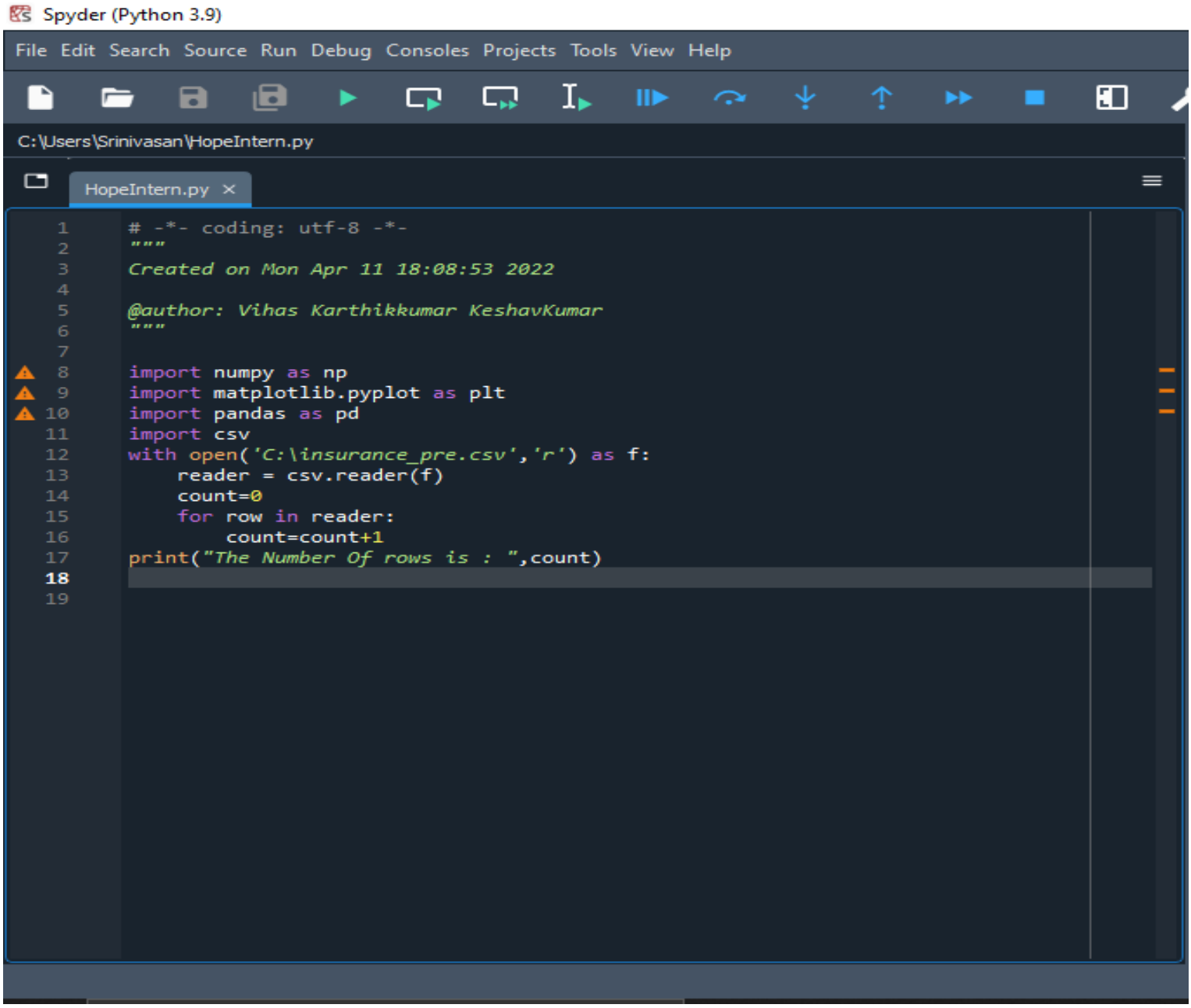
GUIDED BY

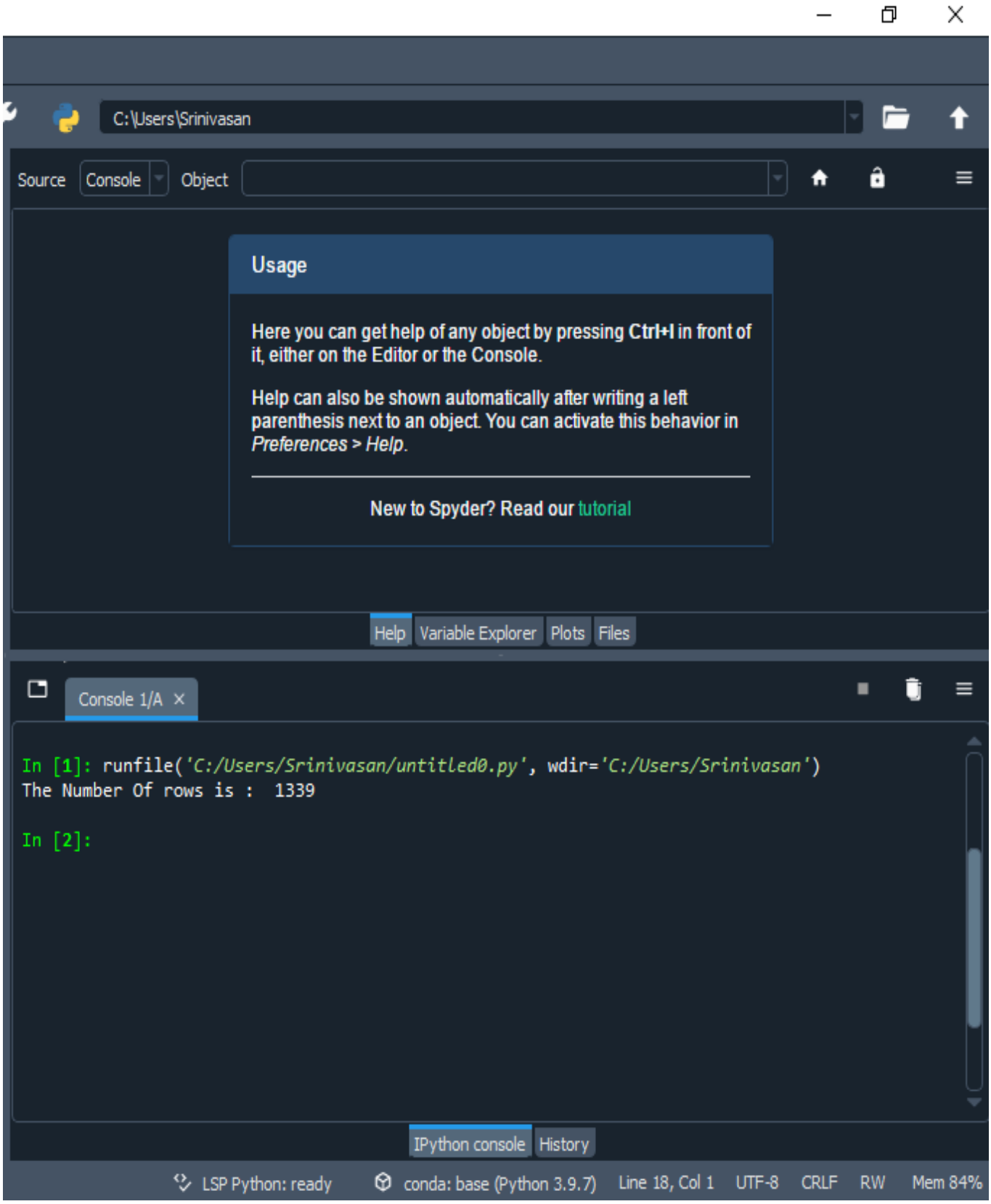
Ms. RAMISHA RANI K

Problem Statement:-

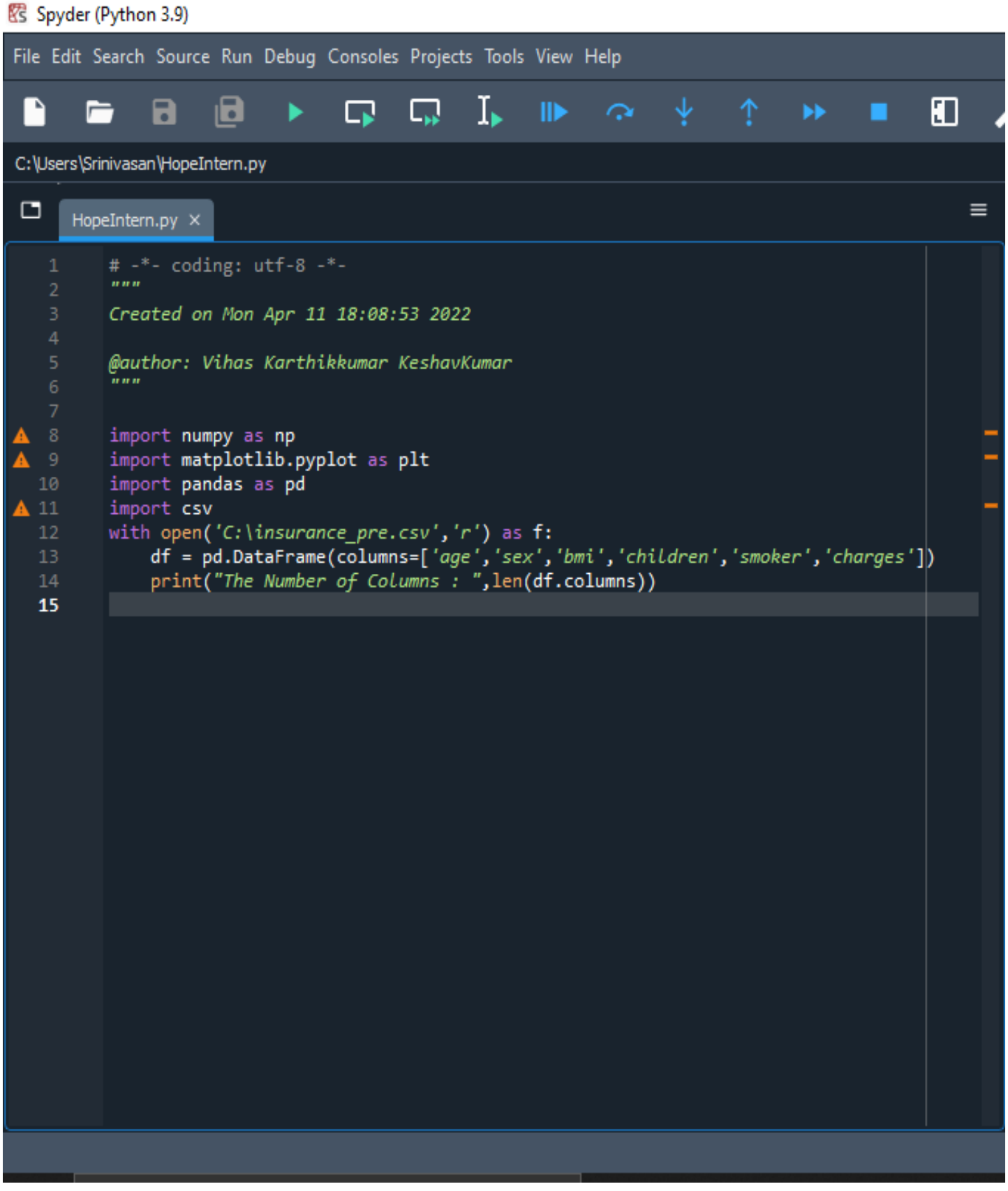
The dataset is provided and wanted to predict the insurance charges or insurance required for a individual based on their age,whether they are a Smoker or whether they have a unhealthy Bmi and classify based on the parameters.

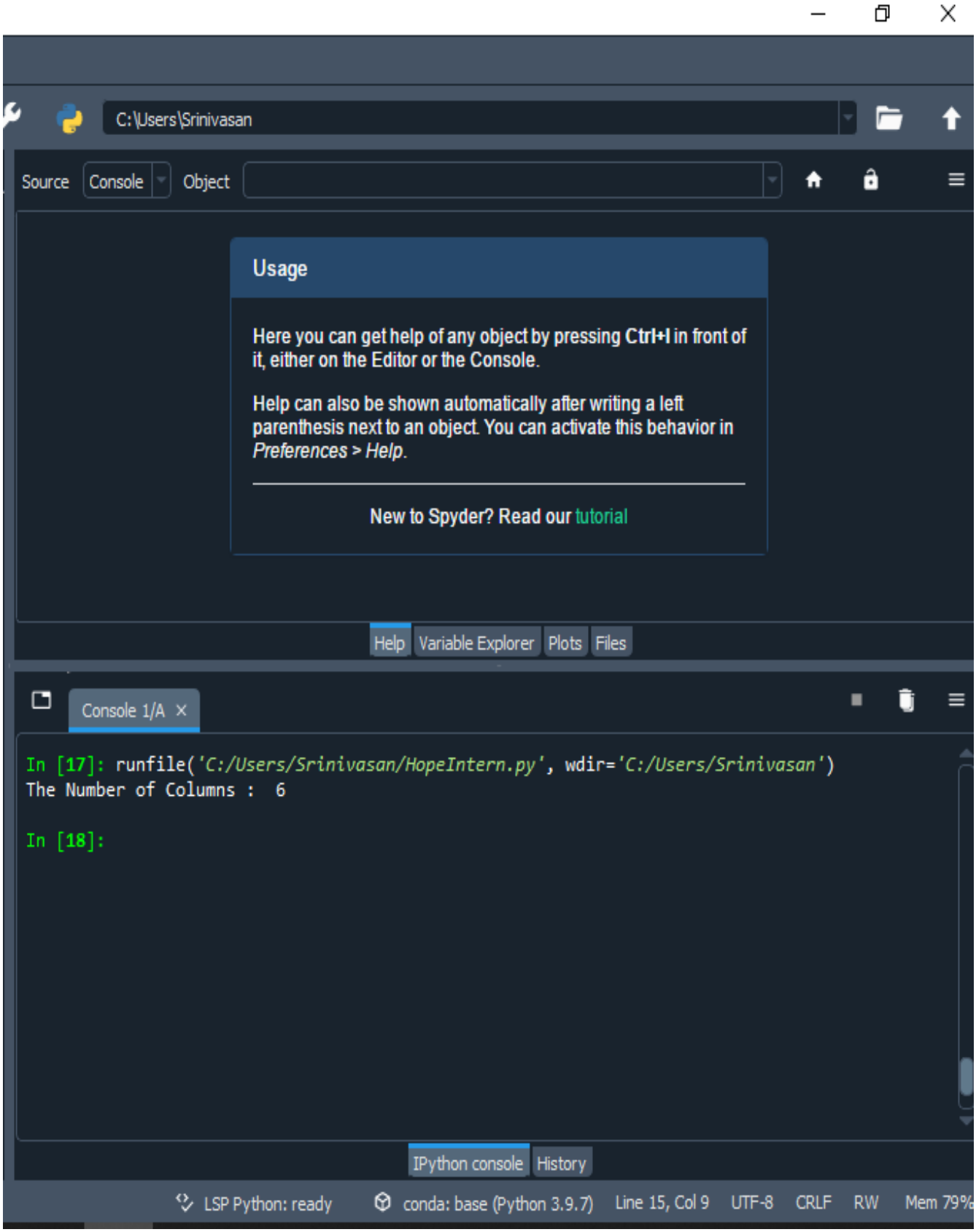
The Number of Rows:-




C:\Users\Srinivasan
Source
Console
Object
Usage
Here you can get help of any object by pressing Ctrl+I in front of it, either on the Editor or the Console.
Help can also be shown automatically after writing a left parenthesis next to an object. You can activate this behavior in Preferences > Help.
New to Spyder? Read our tutorial
Help
Variable Explorer
Plots
Files
Console 1/A
In [1]: runfile('C:/Users/Srinivasan/untitled0.py', wdir='C:/Users/Srinivasan')
The Number Of rows is : 1339
In [2]:
IPython console
History
LSP Python: ready
conda: base (Python 3.9.7)
Line 18, Col 1
UTF-8
CRLF
RW
Mem 84%

The Number of Columns:-




C:\Users\Srinivasan
Source
Console
Object
Usage
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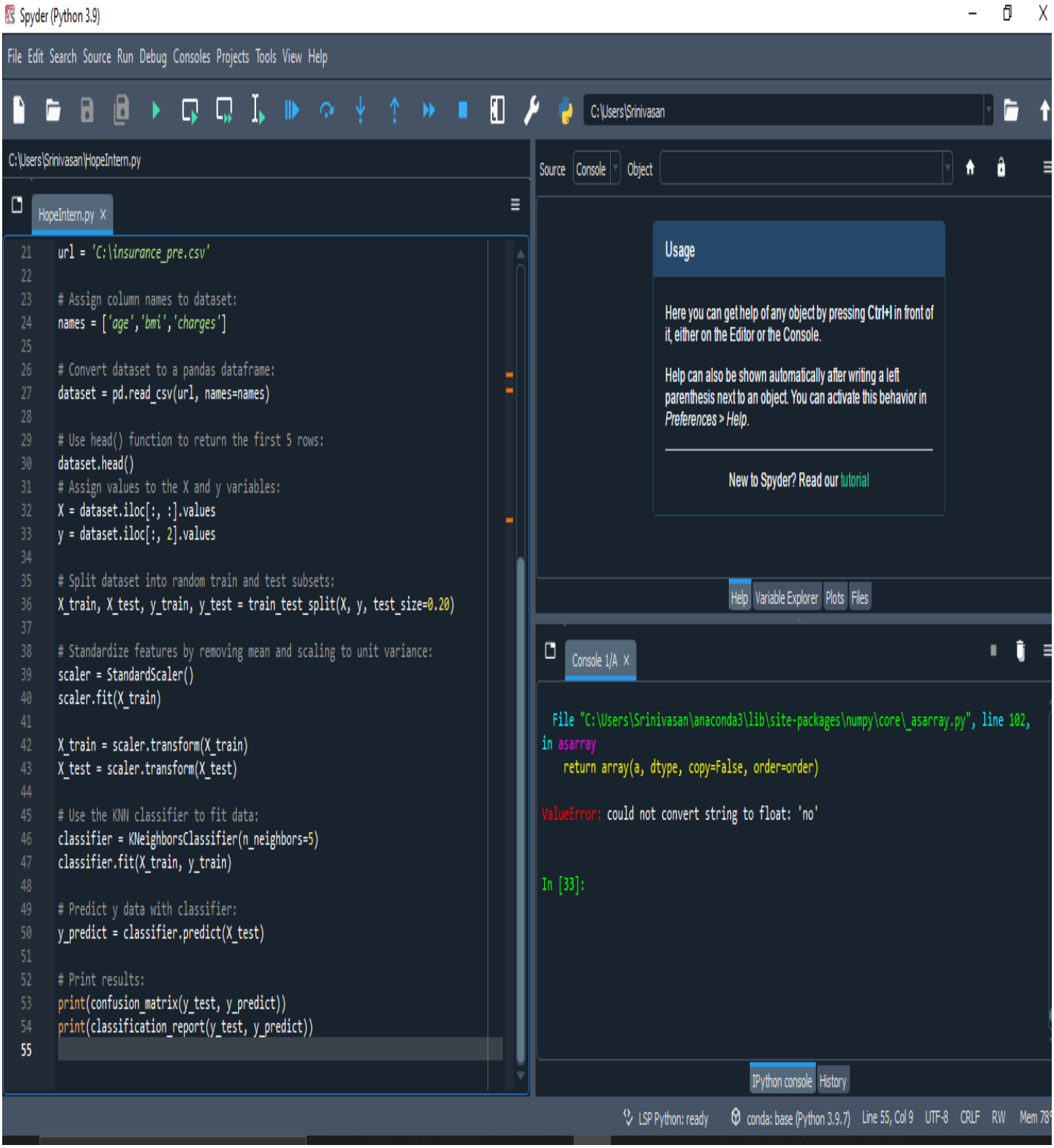
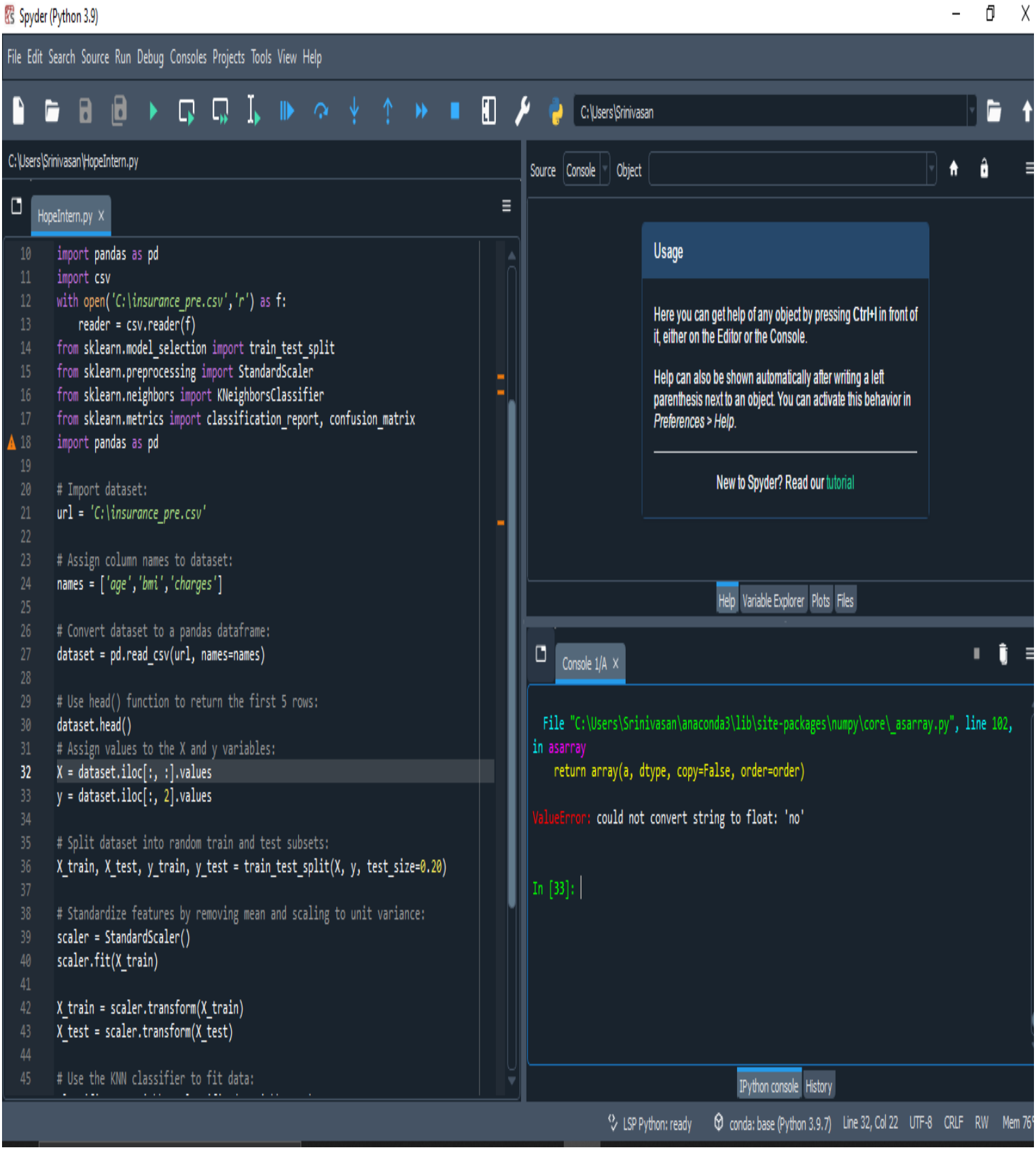
Console 1/A
In [17]: runfile('C:/Users/Srinivasan/HopeIntern.py', wdir='C:/Users/Srinivasan')
The Number of Columns : 6
In [18]:
IPython console
History
LSP Python: ready
conda: base (Python 3.9.7)
Line 15, Col 9
UTF-8
CRLF
RW
Mem 79%

KNN Nearest Neighbour




Spyder (Python 3.9)
File Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\Srinivasan
C:\Users\Srinivasan\HopeIntern.py
HopeIntern.py
import pandas as pd
import csv
with open('C:\insurance_pre.csv','r') as f:
reader = csv.reader(f)
from sklearn.model_selection import train_test_split
from sklearn.preprocessing import StandardScaler
from sklearn.neighbors import KNeighborsClassifier
from sklearn.metrics import classification_report, confusion_matrix
import pandas as pd
# Import dataset:
url = 'C:\insurance_pre.csv'
# Assign column names to dataset:
names = ['age','bmi','charges']
# Convert dataset to a pandas dataframe:
dataset = pd.read_csv(url, names=names)
# Use head() function to return the first 5 rows:
dataset.head()
# Assign values to the X and y variables:
X = dataset.iloc[:, :].values
y = dataset.iloc[:, 2].values
# Split dataset into random train and test subsets:
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.20)
# Standardize features by removing mean and scaling to unit variance:
scaler = StandardScaler()
scaler.fit(X_train)
X_train = scaler.transform(X_train)
X_test = scaler.transform(X_test)
# Use the KNN classifier to fit data:
Source Console Object
Usage
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Help Variable Explorer Plots Files
Console 1/A
File "C:\Users\Srinivasan\anaconda3\lib\site-packages\numpy\core_asarray.py", line 102, in asarray
return array(a, dtype, copy=False, order=order)
ValueError: could not convert string to float: 'no'
In [33]:
IPython console History
LSP Python: ready
conda: base (Python 3.9.7)
Line 32, Col 22
UTF-8
CRLF
RW