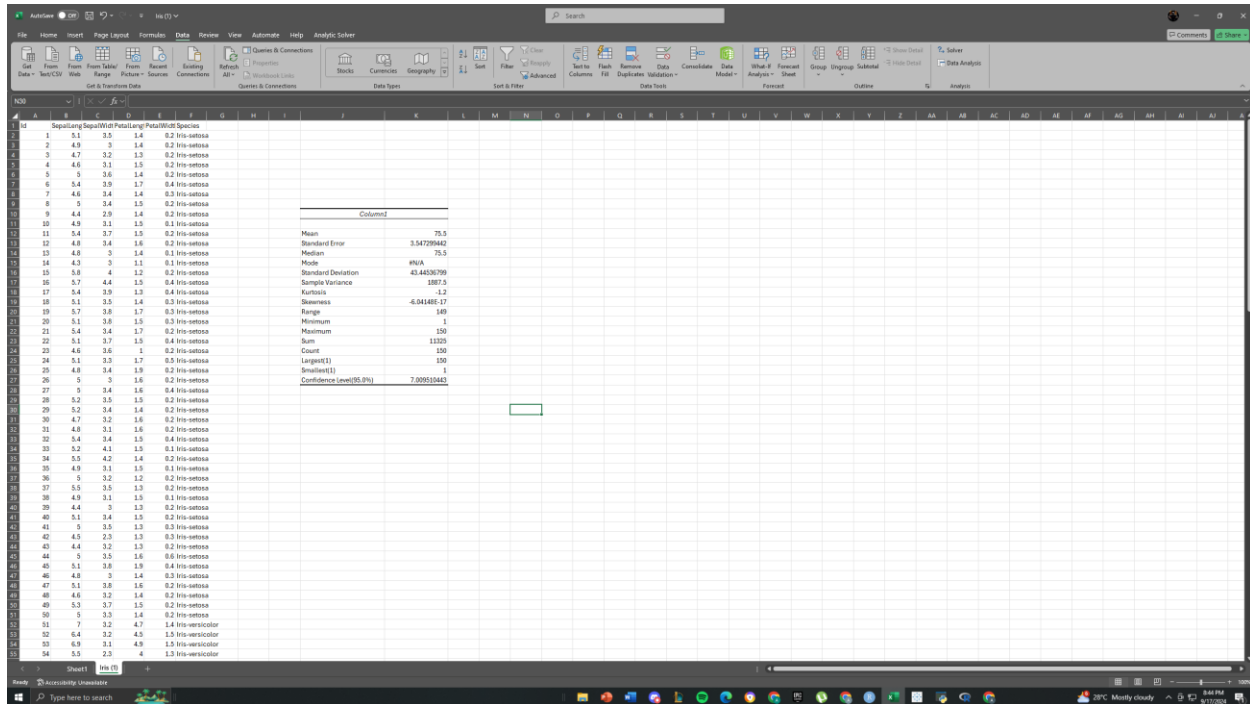


WEEK 2: LAB ACTIVITIES

EXCEL:



Column	Mean	Standard Error	Median	Mode	Standard Deviation	Sample Variance	Kurtosis	Skewness	Range	Minimum	Maximum	Sum	Count	Longest()	Smallest()	Confidence Level(95.0%)
	75.5	3.6479942	75.5	N/A	43.4436799	1887.5	1.2	-6.041481	149	1	150	11205	150	150	1	7.009510481

PYTHON:

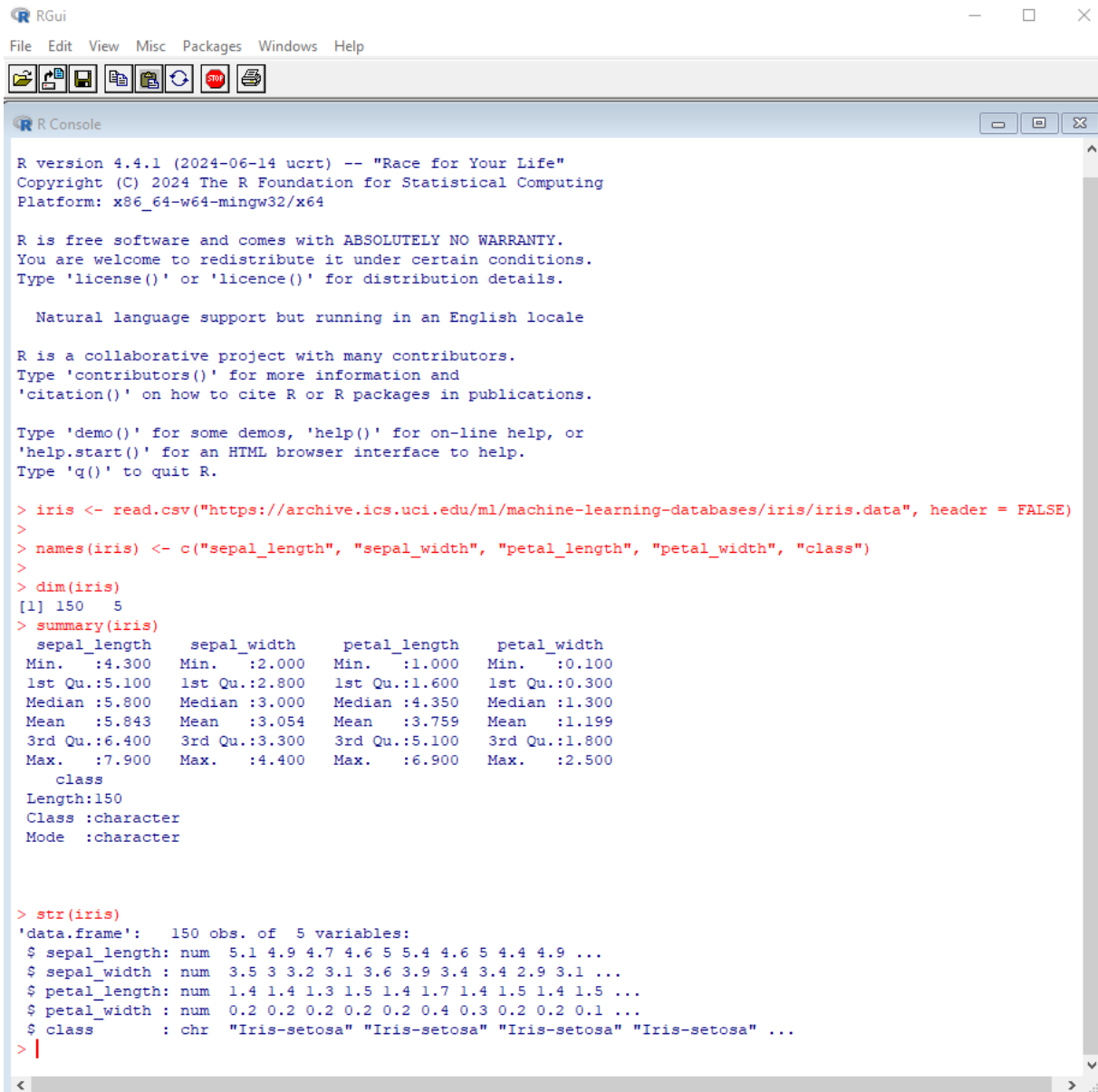
```
Python 3.12 (64-bit)

Python 3.12.5 (tags/v3.12.5:ff3bc82, Aug 6 2024, 20:45:27) [MSC v.1940 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> import pandas as pd
>>> url = "https://archive.ics.uci.edu/ml/machine-learning-databases/iris/iris.data"
>>> col_names = ['sepal_length', 'sepal_width', 'petal_length', 'petal_width', 'class']
>>> iris = pd.read_csv(url, header=None, names=col_names)
>>> print(iris.shape)
(150, 5)
>>> print(iris.describe())
   sepal_length  sepal_width  petal_length  petal_width
count  150.000000  150.000000  150.000000  150.000000
mean     5.843333     3.054000     3.758667     1.198667
std     0.828066     0.433594     1.764420     0.763161
min     4.300000     2.000000     1.000000     0.100000
25%     5.100000     2.800000     1.600000     0.300000
50%     5.800000     3.000000     4.350000     1.300000
75%     6.400000     3.300000     5.100000     1.800000
max     7.900000     4.400000     6.900000     2.500000

>>> print(iris.info())
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 5 columns):
 #   Column        Non-Null Count  Dtype  
---  -
 0   sepal_length  150 non-null   float64
 1   sepal_width   150 non-null   float64
 2   petal_length  150 non-null   float64
 3   petal_width   150 non-null   float64
 4   class         150 non-null   object  
dtypes: float64(4), object(1)
memory usage: 6.0+ KB
None
>>>
```

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BSIT 3C

R:



The screenshot shows the RGui application window. The title bar reads 'RGui'. The menu bar includes 'File', 'Edit', 'View', 'Misc', 'Packages', 'Windows', and 'Help'. Below the menu bar is a toolbar with icons for file operations and execution. The main window is the 'R Console', which displays the following text:

```
R version 4.4.1 (2024-06-14 ucrt) -- "Race for Your Life"
Copyright (C) 2024 The R Foundation for Statistical Computing
Platform: x86_64-w64-mingw32/x64

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> iris <- read.csv("https://archive.ics.uci.edu/ml/machine-learning-databases/iris/iris.data", header = FALSE)
> 
> names(iris) <- c("sepal_length", "sepal_width", "petal_length", "petal_width", "class")
> 
> dim(iris)
[1] 150 5
> summary(iris)
  sepal_length sepal_width petal_length petal_width
Min.   :4.300   Min.   :2.000   Min.   :1.000   Min.   :0.100
1st Qu.:5.100   1st Qu.:2.800   1st Qu.:1.600   1st Qu.:0.300
Median :5.800   Median :3.000   Median :4.350   Median :1.300
Mean   :5.843   Mean   :3.054   Mean   :3.759   Mean   :1.199
3rd Qu.:6.400   3rd Qu.:3.300   3rd Qu.:5.100   3rd Qu.:1.800
Max.   :7.900   Max.   :4.400   Max.   :6.900   Max.   :2.500
  class
Length:150
Class :character
Mode  :character

> str(iris)
'data.frame': 150 obs. of 5 variables:
 $ sepal_length: num  5.1 4.9 4.7 4.6 5 5.4 4.6 5 4.4 4.9 ...
 $ sepal_width : num  3.5 3 3.2 3.1 3.6 3.9 3.4 3.4 2.9 3.1 ...
 $ petal_length: num  1.4 1.4 1.3 1.5 1.4 1.7 1.4 1.5 1.4 1.5 ...
 $ petal_width : num  0.2 0.2 0.2 0.2 0.2 0.4 0.3 0.2 0.2 0.1 ...
 $ class       : chr  "Iris-setosa" "Iris-setosa" "Iris-setosa" "Iris-setosa" ...
> |
```

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TABLEAU:

