

# **A Project Report On Pandemic and Stress**

**FOR AISSCE 2022 EXAMINATION  
[AS A PART OF INFORMATICS PRACTICES COURSE]**

**SUBMITTED BY-**

**NAME: ANANYA**

**ROLL NO: 03**

**[UNDER THE GUIDANCE OF  
MS. P.DEEPTI (HOD)]**

# **CERTIFICATE**

This is to certify that ANANYA of class XII-D (Humanities) has successfully completed the project work under guidance of Ms. P.Deepti. She has done her work all in original and finished it in due course of time as per CBSE guidelines.

**NAME: ANANYA**

**Class: XII**

**Section: D (Humanities)**

**HOD**

**MS. P.Deepti**

**Principal**

**MS. Monika Mehan**

# **ACKNOWLEDGEMENT**

I undertook this project work, as the part of my XII IP course. I had tried to apply my best knowledge and experience, gained during and class work experience. However, developing software is generally a quite complex and time-consuming process. It requires a systematic study, insight vision and professional approach during the design and development. Moreover, the developer always feels the need, the help and good wishes of the people near you, who have considerable experience and idea.

I would like to extend my sincere thanks and gratitude to my teacher **MS. P. Deepti**, for giving valuable time and moral support to develop this software.

I also feel indebted to my friends and teammates, Diya Negi and Shreshtha Naugai for the valuable hard work and suggestions during the project work.

# CONTENT

Serial Number	Topics	Page Number
1.	Introduction	5-6
2.	Objective and Scope	7
3.	System Requirement	8
4.	Python Installing Python	9-10
5.	.csv File Importing .csv File	11-13
6.	.csv Project File	14-15
7.	Program Code	16-22
8.	Output <ul style="list-style-type: none"><li>• Gender Analysis</li><li>• Age Group Analysis</li><li>• Overall Age Distribution Analysis</li></ul>	23- 32
9.	Mean, Median and Mode	33
10.	Mean, Median and Mode Output	34-39

# INTRODUCTION

The COVID-19 pandemic has taken hold of us, physically and mentally. It has dragged us to the darkest niche of our minds. Moreover, the fear of encountering the virus has made us anxious and exhausted.

After the pandemic, stress levels have surged. For the purpose of our study and the Project, we have opted to use these criteria.

Tables and graphs can be used to organise and evaluate the collected data.

With the help of Python, we've created a module that calculates and analyses two primary data sets: first, stress-related symptoms' fluctuation in different age groups (15-18, 19-30, 30-45 years old), then stress-related symptoms' fluctuation in female and male participants.

A huge country's data will now be easier to handle, and stress-related disorders will now be easily identifiable.

As a result of this, residents would be made aware of the significance of mental health, especially in these trying times.

This project, which incorporates data collection, has been built from the ground up.

For graphical assessment and analysis, our project has all the necessary data. In addition, it calculates the mean, median, and mode.

It's important to remember that no project is final, and this Project is no exception. It can be launched even at an international level by increasing the diversity of data in our project.

# OBJECTIVE AND SCOPE OF THE PROJECT

After the pandemic, stress levels have surged. For the purpose of our study and the Project, we have opted to use this criterion.

A huge country's data will now be easier to handle, and stress-related illnesses will be more easily identified. As a result of this, residents would be made aware of the significance of mental health, especially in these trying times. This project, which incorporates data collection, has been built from the ground up.

For graphical assessment and analysis, our project has all the necessary data. In addition, it calculates the mean, median, and mode.

It's important to remember that no project is final, and this Project is no exception. It can be launched even at an international level by increasing the diversity of data in our project.

# SYSTEM REQUIREMENT

## **Python Minimum Hardware Requirements**

- ❖ Modern Operating **System**:
- ❖ x86 64-bit CPU (Intel / AMD architecture)
- ❖ 4 GB RAM.
- ❖ 5 GB free disk space



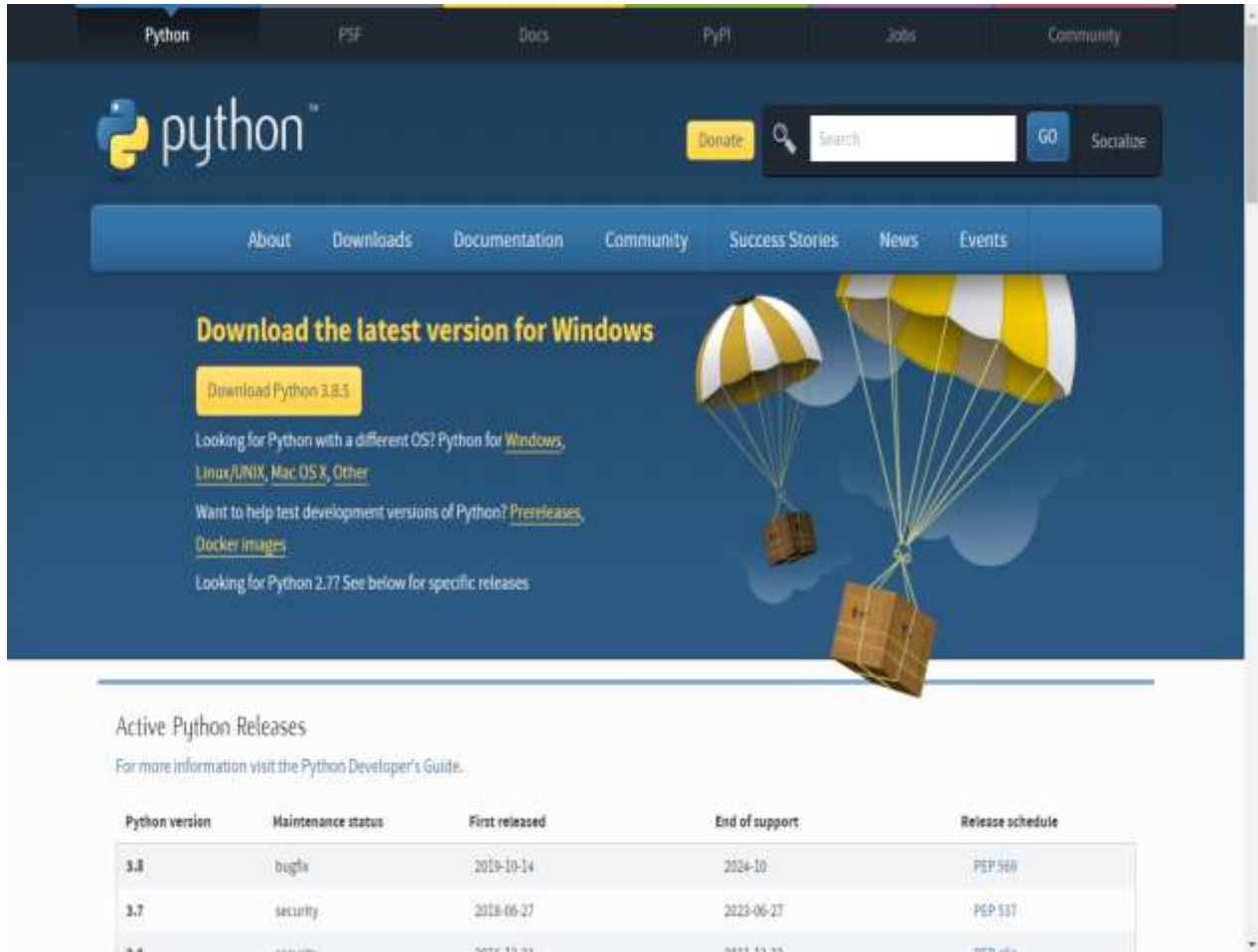


## PYTHON

Python is a high-level, general-purpose programming language that can be executed by an interpreter. In 1991, Guido van Rossum created Python, a programming language with a design philosophy that promotes code readability by making extensive use of whitespace.

# INSTALLING PYTHON

1. Download Python <https://www.python.org/>



The screenshot shows the Python.org website. The top navigation bar includes links for Python, PSF, Docs, PyPI, Jobs, and Community. Below this is the Python logo and a search bar. A secondary navigation bar contains links for About, Downloads, Documentation, Community, Success Stories, News, and Events. The main content area features a large banner with the text "Download the latest version for Windows" and a button to "Download Python 3.8.5". To the right of the banner is an illustration of two parachutes carrying boxes. Below the banner, there are links for "Looking for Python with a different OS?" and "Want to help test development versions of Python?". At the bottom, there is a section titled "Active Python Releases" with a table of release information.

**Download the latest version for Windows**

[Download Python 3.8.5](#)

Looking for Python with a different OS? Python for [Windows](#), [Linux/UNIX](#), [Mac OS X](#), [Other](#)

Want to help test development versions of Python? [Prereleases](#), [Docker images](#)

Looking for Python 2.7? See below for specific releases

**Active Python Releases**

For more information visit the [Python Developer's Guide](#).

Python version	Maintenance status	First released	End of support	Release schedule
3.8	bugfix	2019-10-14	2024-10	PEP 568
3.7	security	2018-06-27	2023-06-27	PEP 537
2.7	security	2010-10-13	2019-12-13	PEP 314

2. Install it

# .CSV FILE

A comma-separated values file is a delimited text file that uses a comma to separate values. Each line of the file is a data record. Each record consists of one or more fields, separated by commas. The use of the comma as a field separator is the source of the name for this file format.

## IMPORTING .CSV FILE

A CSV file can be prepared in any excel sheet.

This file can be given a name and then can be saved in the system.

Any such database file can be imported in Python Pandas.

Thus, enabling the database task easy and importing data, thus compiling data

This will reduce our re-preparation of data in Python Pandas.

Also, it helps in reducing workload and complexity of programming.

The csv file thus imported can be used for performing various tasks as per the necessity of the programmer and instructions of the customer.

The steps involved in importing csv files are as follows:

```
import pandas as pd
df = pd.read_csv(r'Path where the CSV file is stored\File
name.csv')
print(df)
```

### Step 1: Capture the File Path

Firstly, capture the full path where your CSV file is stored. In my case, the CSV file is stored under the following path:

**C:\Users\admin\Desktop\ananya\IP project  
survey.csv**

You'll need to modify the Python code below to reflect the path where the CSV file is stored on *your* computer. Don't forget to include the:

- File name (as highlighted in green). You may choose a different file name, but make sure that the file name specified in the code matches with the actual file name
- File extension (as highlighted in blue). The file extension should always be '.csv' when importing CSV files

## **Step 2: Apply the Python code**

Type/copy the following code into Python, while making the necessary changes to your path. Here is the code for our example (you can find additional comments within the code itself):

```
import pandas as pd
df=pd.read_csv(r'C:\Users\admin\Desktop\ananya\IP project survey.csv')
print(df)
#to read the csv file (put 'r' before the path string to address any special
characters in the path, such as '\').
#don't forget to put the file name at the end of the path + ".csv"
```

## **Step 3: Run the Code**

Finally, run the Python code and you'll get the output in Python.

# .CSV PROJECT FILE

IP project survey - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW

From Access From Web From Text From Other Sources Existing Connections Refresh All Edit Links Connections

Sort & Filter Sort Filter Advanced

Data Tools Text to Columns Flash Fill Remove Duplicates Validation Data Consolidate What-If Analysis Relationships Group Ungroup Subtotal Outline

A2 X ✓ fx Yashika

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Name	Age(yrs)	Gender	Question1	Question2	InAge															
2	Yashika	15-18	F	NO	YES	16															
3	Deepak	31-45	M	NO	YES	31															
4	Deepika	19-30	F	NO	YES	28															
5	Ms.Deepti	31-45	F	NO	YES	34															
6	Pooja	19-30	F	NO	YES	29															
7	Shubham	31-45	M	NO	YES	34															
8	Shray	15-18	M	NO	NO	17															
9	Ujjwal	15-18	M	NO	NO	15															
10	Mansi	15-18	F	NO	NO	18															
11	Anirudh	19-30	M	NO	YES	20															
12	Aakriti	31-45	F	NO	YES	33															
13	Harshita	15-18	F	NO	YES	16															
14	Raj	15-18	M	NO	YES	18															
15	Shraddha	15-18	F	YES	YES	17															
16	Kim	31-45	F	NO	YES	42															
17	Manav	19-30	M	NO	NO	26															
18	Viruu	19-30	M	YES	YES	28															
19	Dr. Arti	31-45	F	NO	NO	36															
20	Jasmine	31-45	F	NO	NO	38															
21	Bhavya	19-30	F	NO	NO	22															
22	Mudit	19-30	M	YES	YES	20															
23	Shivani	19-30	F	YES	NO	21															

IP project survey

READY Type here to search 31°C Haze 6:09 PM 10/7/2021

IP project survey - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW

Get External Data: From Access, From Web, From Text, From Other Sources, Existing Connections, Refresh All, Edit Links

Connections: Connections, Properties, Edit Links

Sort & Filter: Sort, Filter, Clear, Reapply, Advanced

Data Tools: Text to Columns, Flash Fill, Remove Duplicates, Data Validation, Consolidate, What-If Analysis, Relationships, Group, Ungroup, Subtotal, Show Detail, Hide Detail

Outline: Outline

Formula Bar: A21, Bhavya

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
21	Bhavya	19-30	F	NO	NO	22															
22	Mudit	19-30	M	YES	YES	20															
23	Shivani	19-30	F	YES	NO	21															
24	Megha	19-30	F	NO	NO	25															
25	Anant	19-30	M	NO	NO	23															
26	Pushpa	31-45	F	NO	NO	40															
27	Ms. Rinki	31-45	F	NO	NO	39															
28	Sundeep	31-45	F	NO	NO	31															
29	Shuaib	19-30	M	YES	YES	22															
30	Kusum	31-45	F	NO	NO	43															
31	Anita	31-45	F	NO	YES	45															
32																					
33																					
34																					
35																					
36																					
37																					
38																					
39																					
40																					
41																					
42																					
43																					
44																					

IP project survey

READY

Type here to search

31°C Haze 6:09 PM 10/7/2021

# PROGRAM CODE

```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

data=pd.read_csv(r'C:\Users\admin\Desktop\ananya\IP
project survey.csv', sep=',', header=0,
names=['Name','Age(yrs)', 'Gender', 'Question 1',
'Question 2','InAge'])

df=pd.DataFrame(data,columns=['Name','Age(yrs)',
'Gender', 'Question 1', 'Question 2','InAge'])

x=int(input("Enter 1 for bar graph for Gender Analysis or
2 for line plot for Age Group Analysis or 3 for histogram
for Overall Age Distribution Analysis: "))

if x==1:
    import matplotlib.pyplot as plt
```



```
c=['total','increased','decreased','constant']
a=[19,8,1,10]
b=[11,4,0,7]
plt.barh(c,a,color='aqua', label='Females')
plt.barh(c,b,color='deeppink', label='Males')
plt.xticks(np.arange(1,25,1))
plt.title('Gender Analysis')
plt.ylabel('Status')
plt.xlabel('Number of Females/Males')
plt.legend()
plt.show()
```

```
elif x==2:
```

```
y=str(input('Enter \'a\' for Age Group 15-18, \'b\' for  
Age Group 19-30 or \'c\' for Age Group 31-45: '))
```

```
if y=='a':
```

```
    x=[1,9]
```

```
    y=[8,2]
```

```
    z=['Yes','No']
```

```
plt.plot(z,x,color='teal',linewidth=5,label='Before  
Pandemic')
```

```
plt.plot(z,y,color='darkviolet',linewidth=5,label='After  
Pandemic\'s Start')
```

```
plt.grid(True)
```

```
plt.ylabel('Frequency')
```

```
plt.xlabel('Yes/No Answer')
```

```
plt.title('Age Group Analysis (15-18)')
```

```
plt.legend()
```

```
plt.show()
```

```
elif y=='b':
```

```
    x=[4,6]
```

```
    y=[5,5]
```

```
    z=['Yes','No']
```

```
        plt.plot(z,x,color='gold',linewidth=5,label='Before  
Pandemic')
```

```
plt.plot(z,y,color='darkred',linewidth=5,label='After  
Pandemic\'s Start')
```

```
plt.title('Age Group Analysis (19-30)')
```

```
plt.grid(True)
plt.ylabel('Frequency')
plt.xlabel('Yes/No Answer')
plt.legend()
plt.show()
elif y=='c':
    x=[0,10]
    y=[4,6]
    z=['Yes','No']

    plt.plot(z,x,linewidth=5,color='mediumvioletred',label
    ='Before Pandemic')

    plt.plot(z,y,linewidth=5,color='darkgreen',label='After
    Pandemic\'s Start')
    plt.grid(True)
    plt.ylabel('Frequency')
    plt.xlabel('Yes/No Answer')
    plt.title('Age Group Analysis (31-45)')
    plt.legend()
    plt.show()
```

else:

print('Kindly enter a valid option.')

elif x==3:

x=[14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,  
,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,4  
6]

z=[16,31,28,34,29,34,17,15,18,20,33,16,18,17,42,26,  
,28,36,38,22,20,21,25,23,40,39,31,22,43,45]

plt.hist(z,bins=x,edgecolor='k',color='lightblue',linewi  
dth=3,hatch='..')

plt.xticks(x)

plt.yticks([0,1,2,3])

plt.title('Age Distribution Analysis')

plt.grid(False)

plt.xlabel('Age (in Years)')

plt.ylabel('Frequency')

plt.show()

else:

```
print('Kindly enter a valid number.')
```

```
z=str(input('Enter \'mean\' for Mean of Age (in Years),  
'median\' for Median of Age (in Years) or  \'mode\' for  
Mode : '))
```

```
if z=='mean':
```

```
print(df.mean(numeric_only=True))
```

```
elif z=='median':
```

```
print(df.median(numeric_only=True))
```

```
elif z=='mode':
```

```
a=int(input('Enter 1 for Mode of Age (in Years)  
Distribution, 2 for Mode of Age Group (in Years), 3 for  
Mode of Gender, 4 for Mode of Answers of Stress Pre-  
Pandemic or 5 for Mode of Answers of Stress Post-  
Pandemic: '))
```

```
if a==1:
```

```
print(df['InAge'].mode())
```

```
elif a==2:
```

```
    print(df['Age(yrs)'].mode())
```

```
elif a==3:
```

```
    print(df['Gender'].mode())
```

```
elif a==4:
```

```
    print(df['Question 1'].mode())
```

```
elif a==5:
```

```
    print(df['Question 2'].mode())
```

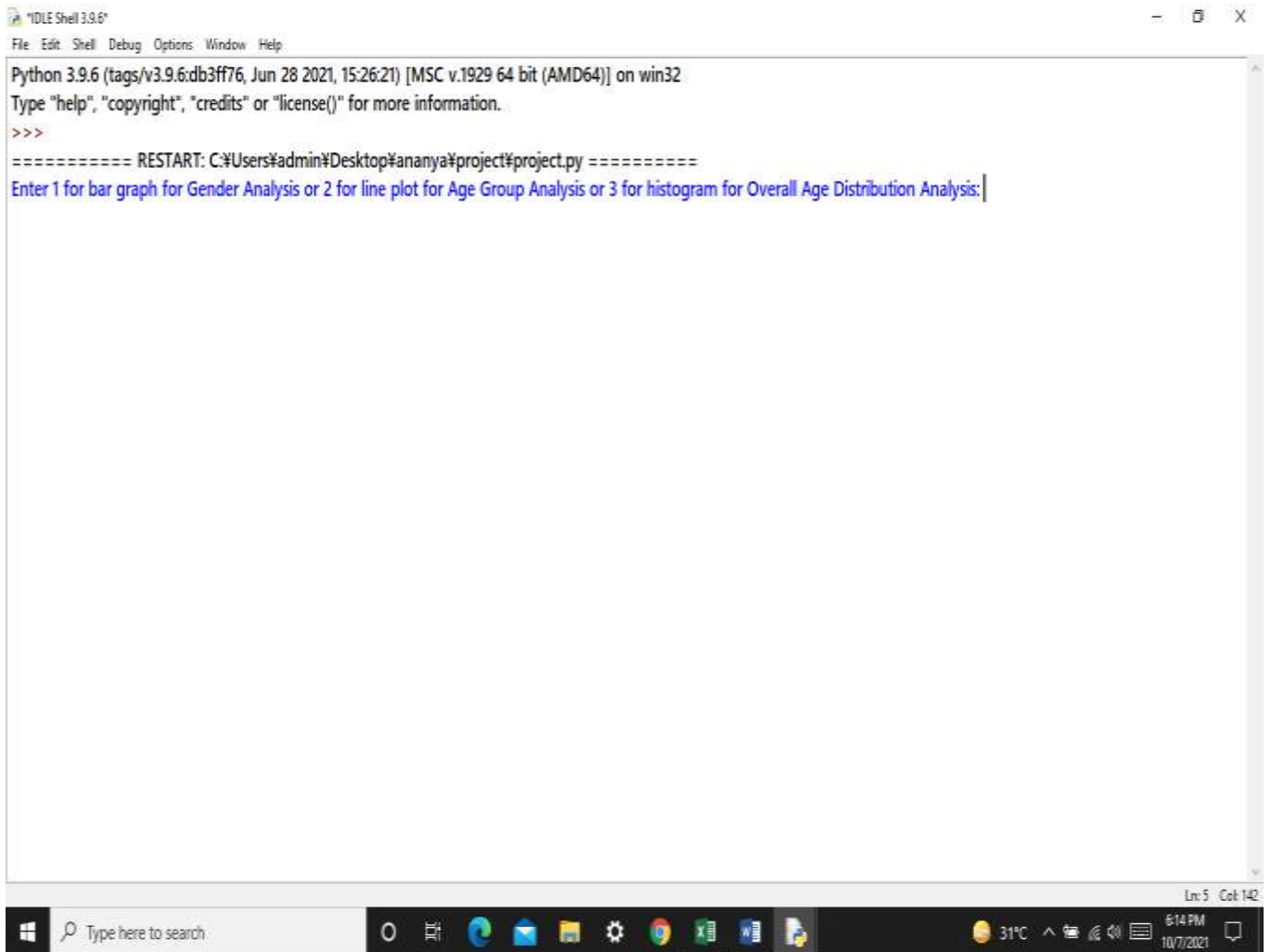
```
else:
```

```
    print('Kindly enter a valid option.')
```

```
else:
```

```
    print('Kindly enter a valid option.')
```

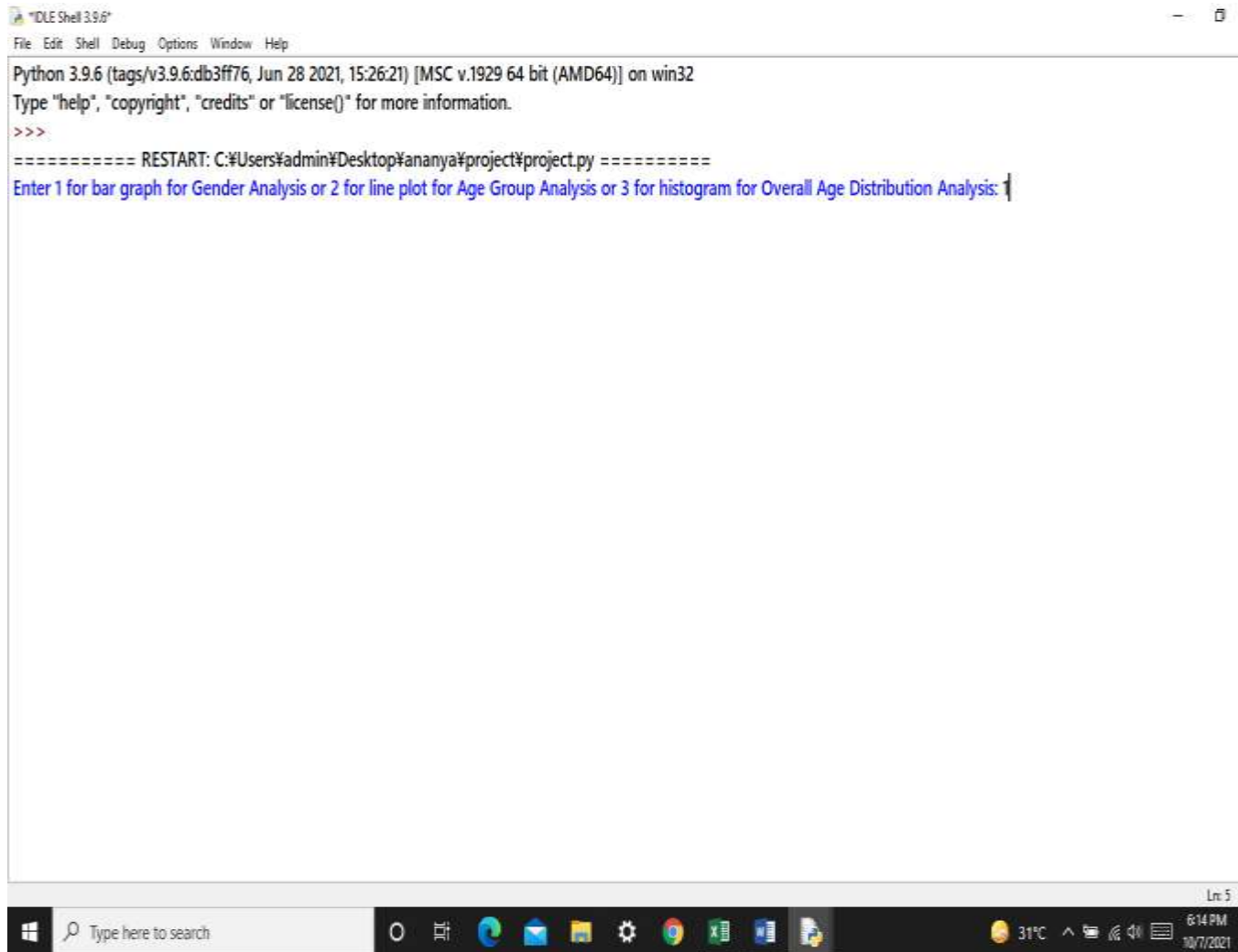
# OUTPUT



The screenshot shows a Windows desktop with a taskbar at the bottom. The taskbar includes the Start button, a search bar, and several application icons. The system tray on the right shows the temperature as 31°C, the time as 6:14 PM, and the date as 10/7/2021. The main window is titled "IDLE Shell 3.9.6" and contains the following text:

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: |
```

# 1. Bar Graph - Gender Analysis

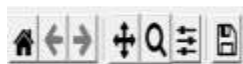
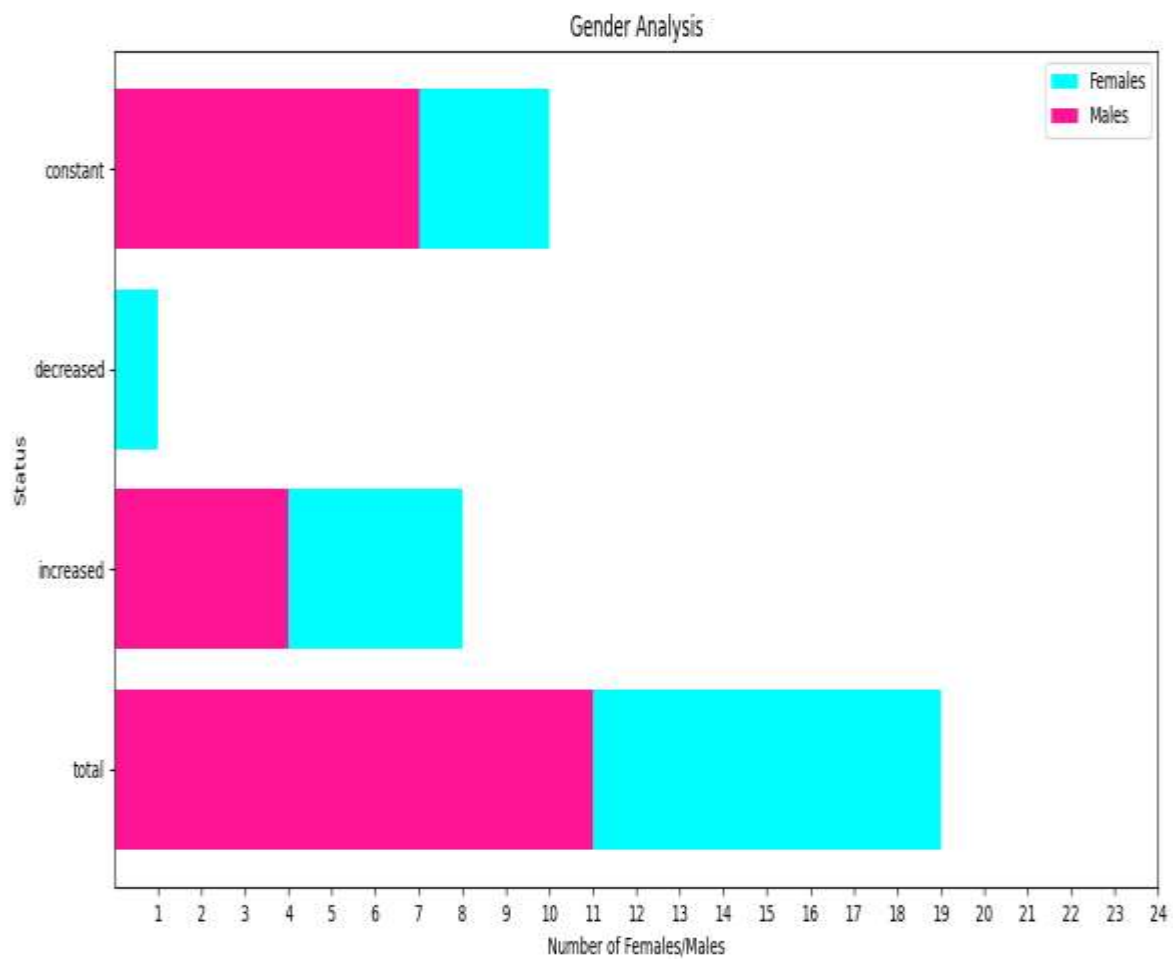
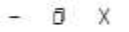


```
"IDLE Shell 3.9.6"
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: |
```

The screenshot shows a Windows 10 desktop with a taskbar at the bottom. The taskbar includes the Start button, a search bar, and several application icons: Edge, Mail, File Explorer, Settings, Chrome, Excel, Word, and a folder icon. The system tray on the right shows the temperature at 31°C, network status, and the time 6:14 PM on 10/7/2021. The IDLE Shell window is open, displaying the Python 3.9.6 prompt and the program's restart message. The program is waiting for user input at the prompt.



Figure 1



## 2. Line Plot - Age Group Analysis

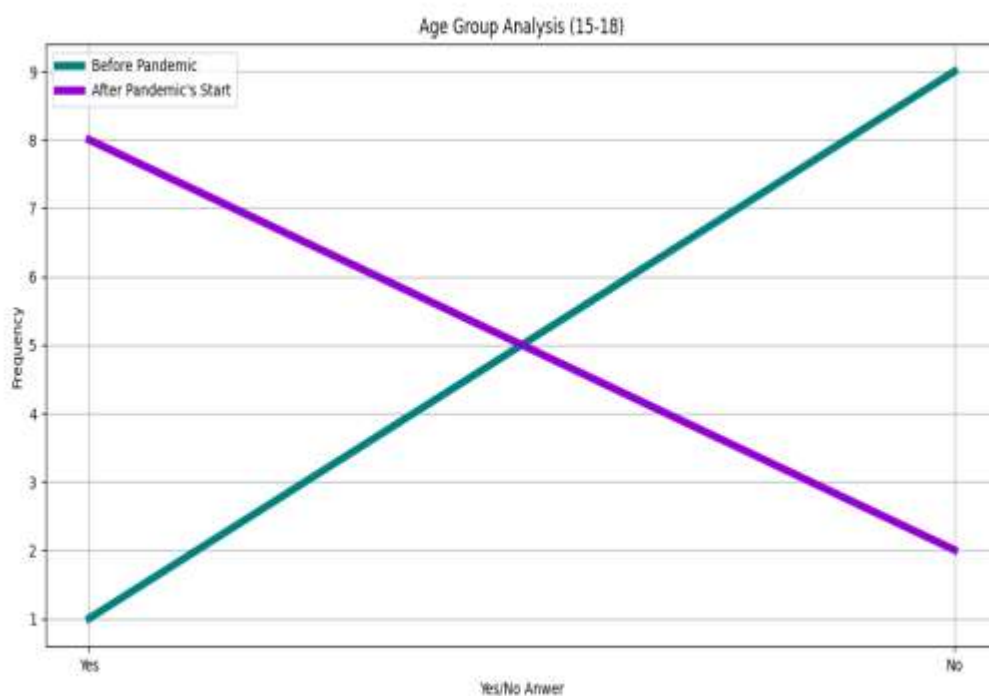
```
"IDLE Shell 3.9.6"
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type 'help', 'copyright', 'credits' or 'license()' for more information.
>>>
===== RESTART: C:\Users\admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 2
```

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 2
Enter 'a' for Age Group 15-18, 'b' for Age Group 19-30 or 'c' for Age Group 31-45: |
```

a. Age Group 15-18

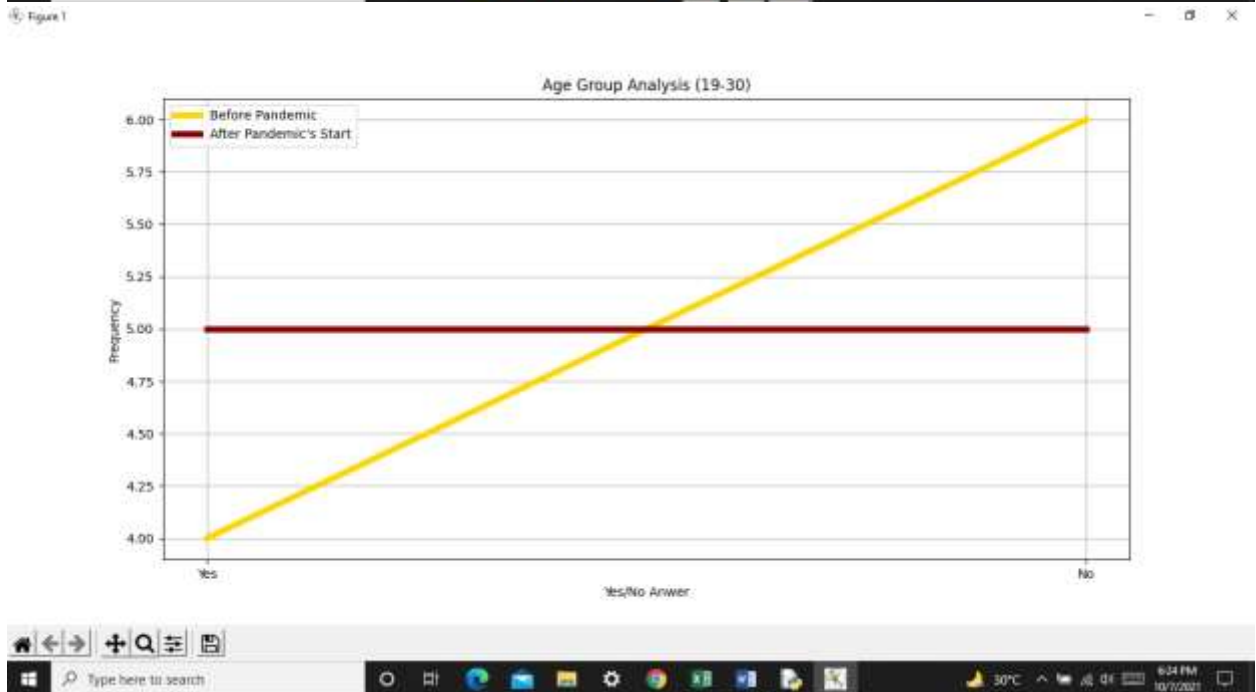
```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Admin\Desktop\Vananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 2
Enter 'a' for Age Group 15-18, 'b' for Age Group 19-30 or 'c' for Age Group 31-45: a
```

Figure 1



## b. Age Group 19-30

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\ADMIN\Desktop\Vananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 2
Enter 'a' for Age Group 15-18, 'b' for Age Group 19-30 or 'c' for Age Group 31-45: b
```



## c. Age Group 31-45

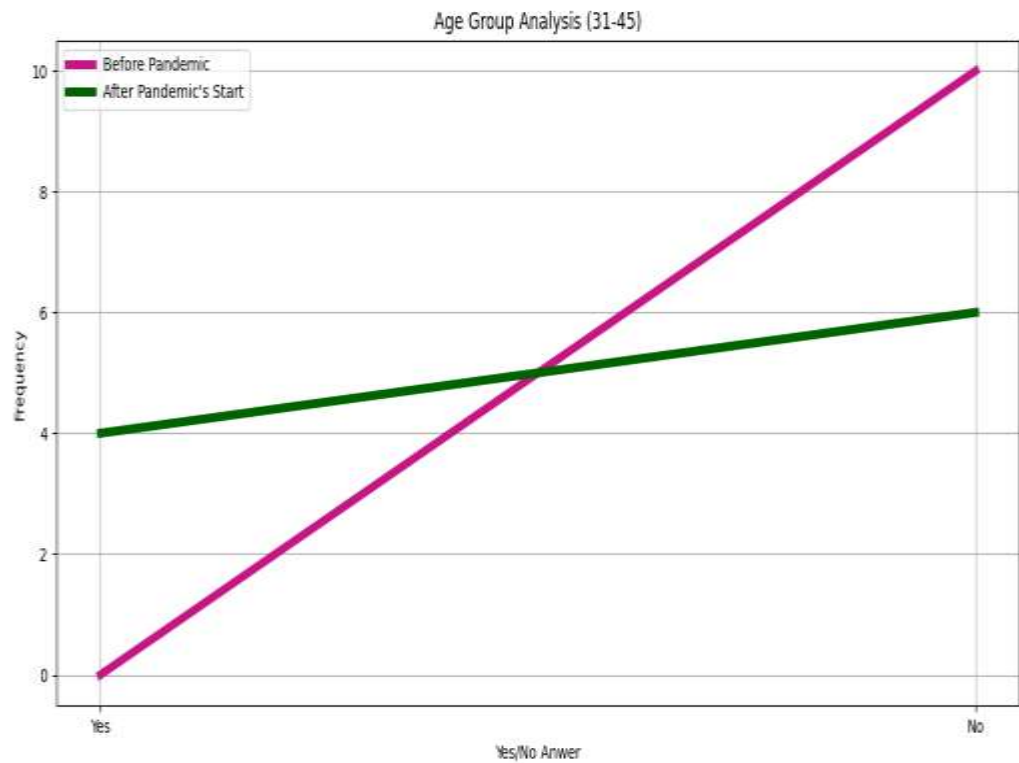


The screenshot shows a Windows 10 desktop environment. A Python 3.9.6 IDLE Shell window is open, displaying the following text:

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\ADMIN\Desktop\Vananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 2
Enter 'a' for Age Group 15-18, 'b' for Age Group 19-30 or 'c' for Age Group 31-45: c
```

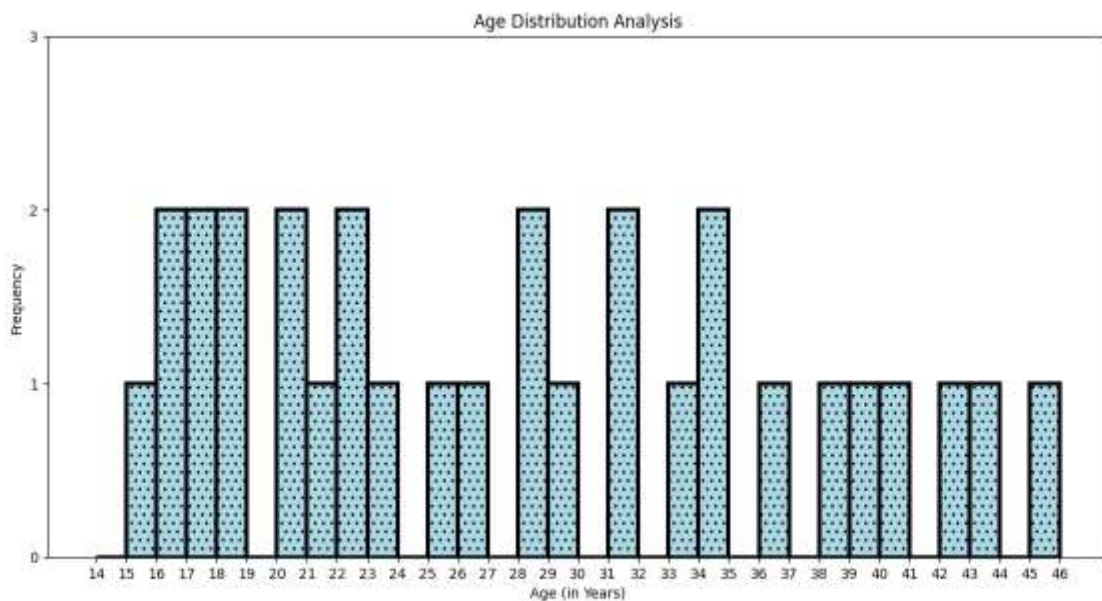
The taskbar at the bottom shows the Start button, a search bar, and several pinned applications including Edge, File Explorer, Settings, and the IDLE Shell. The system tray on the right indicates a temperature of 30°C, the time 6:28 PM, and the date 10/7/2021.

Figure 1



### 3. Histogram - Overall Age Distribution Analysis

```
"IDLE Shell 3.9.6"
File Edit Shell Debug Options Window Help
Python 3.9.6 [tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21] [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 3
```

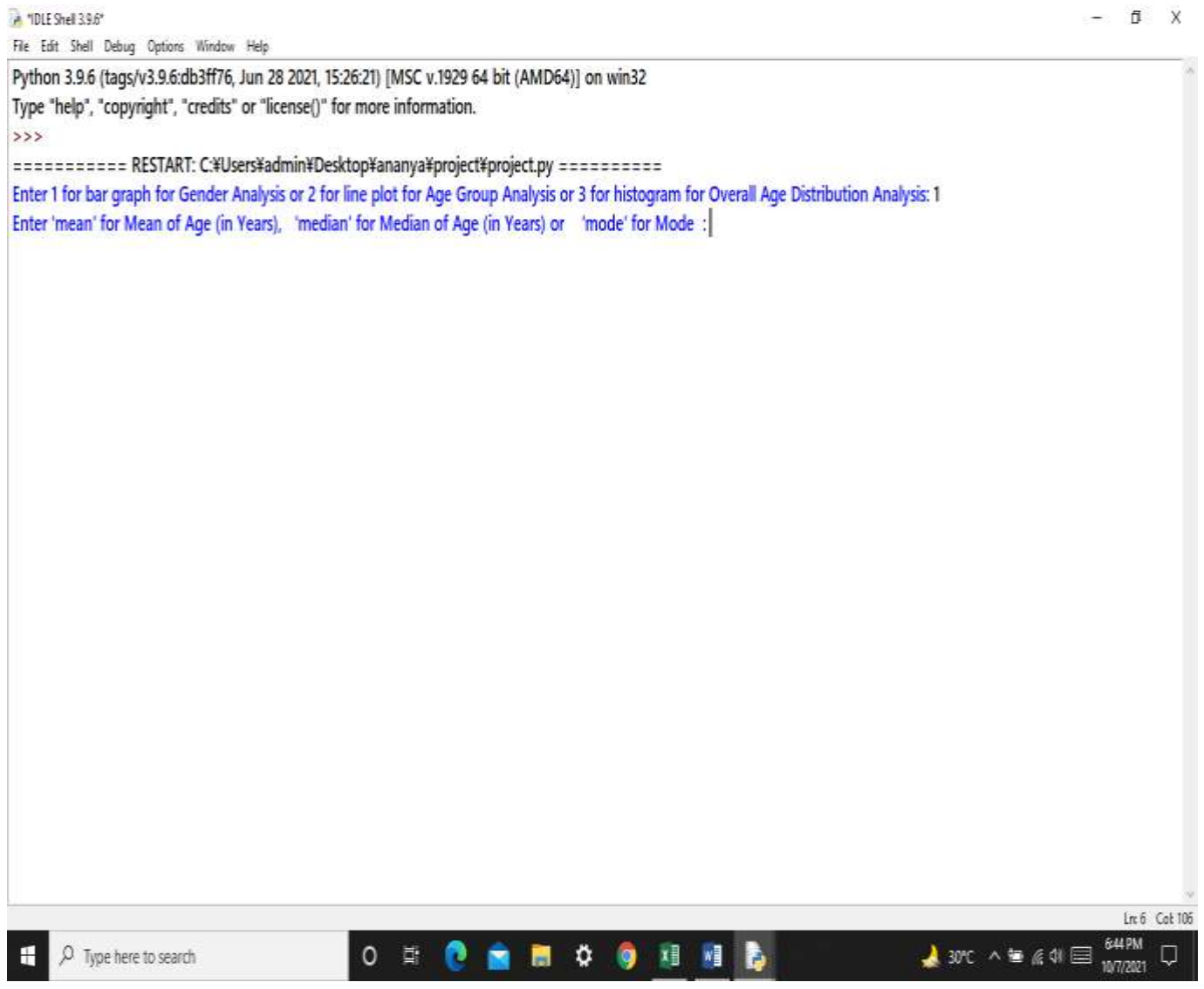




# Mean, Median, Mode

1. Mean is a central value of a finite set of numbers: specifically, the sum of the values divided by the number of values.
2. Median is the value separating the higher half from the lower half of a data set. It can also be called the middle value of the data set.
3. Mode is the value that appears most often in a set of data values.

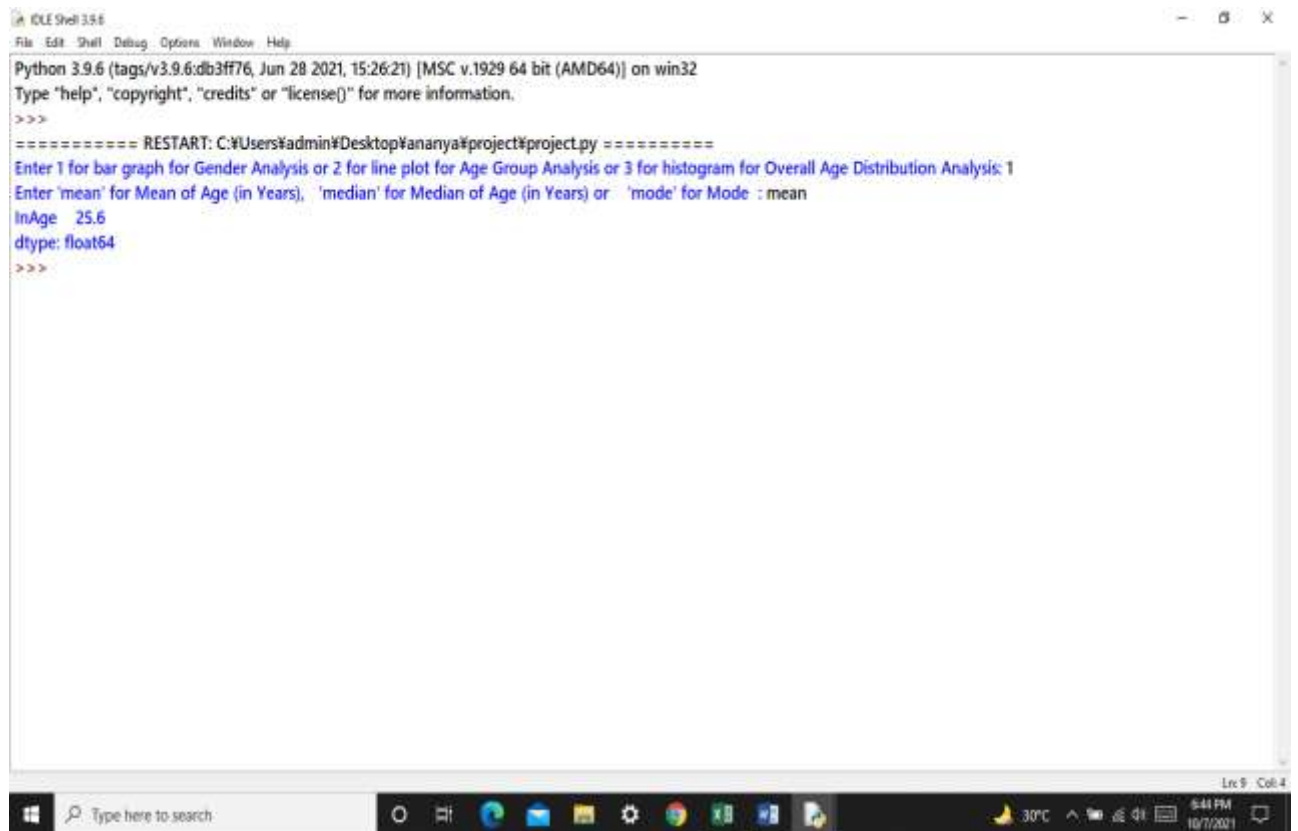
# Mean, Median, Mode Output



```
"IDLE Shell 3.9.6"
File Edit Shell Debug Options Window Help

Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 1
Enter 'mean' for Mean of Age (in Years), 'median' for Median of Age (in Years) or 'mode' for Mode :|
```

# 1. Mean



```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 1
Enter 'mean' for Mean of Age (in Years), 'median' for Median of Age (in Years) or 'mode' for Mode : mean
InAge 25.6
dtype: float64
>>>
```

The screenshot shows a Python IDLE Shell window. The title bar reads "IDLE Shell 3.9.6". The menu bar includes "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The main text area displays the following output:

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 1
Enter 'mean' for Mean of Age (in Years), 'median' for Median of Age (in Years) or 'mode' for Mode : mean
InAge 25.6
dtype: float64
>>>
```

The Windows taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray on the right indicates a temperature of 30°C, the time 5:44 PM, and the date 10/7/2021.

# 2. Median

```
IDLE Shell 3.9.6
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Yadmin\Desktop\Yananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 1
Enter 'mean' for Mean of Age (in Years), 'median' for Median of Age (in Years) or 'mode' for Mode : median
InAge 22.5
dtype: float64
>>>
```

### 3. Mode

#### a. Age (in Years) Distribution

```
IDLE Shell 3.9.6
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Yadmin\Desktop\Yananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 1
Enter 'mean' for Mean of Age (in Years), 'median' for Median of Age (in Years) or 'mode' for Mode : mode
Enter 1 for Mode of Age (in Years) Distribution, 2 for Mode of Age Group (in Years), 3 for Mode of Gender, 4 for Mode of Answers of Stress Pre- Pandemic or 5 for Mode of
Answers of Stress Post-Pandemic: 1
0 16
1 17
2 18
dtype: int64
>>>
```

## b. Age Group (in Years)

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 1
Enter 'mean' for Mean of Age (in Years), 'median' for Median of Age (in Years) or 'mode' for Mode : mode
Enter 1 for Mode of Age (in Years) Distribution, 2 for Mode of Age Group (in Years), 3 for Mode of Gender, 4 for Mode of Answers of Stress Pre- Pandemic or 5 for Mode of
Answers of Stress Post-Pandemic: 2
0 15-18
1 19-30
2 30-45
dtype: object
>>>
```

## c. Gender

```
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 1
Enter 'mean' for Mean of Age (in Years), 'median' for Median of Age (in Years) or 'mode' for Mode : mode
Enter 1 for Mode of Age (in Years) Distribution, 2 for Mode of Age Group (in Years), 3 for Mode of Gender, 4 for Mode of Answers of Stress Pre- Pandemic or 5 for Mode of
Answers of Stress Post-Pandemic: 3
0 F
dtype: object
>>>
```

## d. Answers of Stress Pre- Pandemic



```
IDLE Shell 3.9.6
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Admin\Desktop\Vananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 1
Enter 'mean' for Mean of Age (in Years), 'median' for Median of Age (in Years) or 'mode' for Mode : mode
Enter 1 for Mode of Age (in Years) Distribution, 2 for Mode of Age Group (in Years), 3 for Mode of Gender, 4 for Mode of Answers of Stress Pre- Pandemic or 5 for Mode of
Answers of Stress Post-Pandemic: 4
0 NO
dtype: object
>>>
```

## e. Answers of Stress Post-Pandemic

```
IDLE Shell 3.9.6
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Admin\Desktop\ananya\project\project.py =====
Enter 1 for bar graph for Gender Analysis or 2 for line plot for Age Group Analysis or 3 for histogram for Overall Age Distribution Analysis: 1
Enter 'mean' for Mean of Age (in Years), 'median' for Median of Age (in Years) or 'mode' for Mode : mode
Enter 1 for Mode of Age (in Years) Distribution, 2 for Mode of Age Group (in Years), 3 for Mode of Gender, 4 for Mode of Answers of Stress Pre- Pandemic or 5 for Mode of
Answers of Stress Post-Pandemic: 5
0 YES
dtype: object
>>>
```

# Bibliography

1. NCERT – Informatics Practices, Class XII
2. [www.wikipedia.com](http://www.wikipedia.com)
3. <https://www.google.com/imghp?hl=en>
4. <https://www.geeksforgeeks.org/>



