

Importing Necessary Packages

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

Data Preprocessing

```
df=pd.read_csv(r"C:\Users\Arigala.Adarsh\Downloads\
Stress_Analysis_dataset.csv")
```

```
df.head()
```

	Timestamp	Email Address	
Name \			
0	9/29/2023 16:29:24	pavankalyanc162@gmail.com	Pavan Kalyan
1	9/29/2023 16:38:20	saadiyashaik13@gmail.com	Shaik Haleema saadiya
2	9/29/2023 16:52:51	swethapujari2003@gmail.com	Swetha
3	9/29/2023 16:56:30	arjaebenazer@gmail.com	Chandu
4	9/29/2023 16:57:54	r190411@rguktrkv.ac.in	G.Praharsha

	Email \
0	pavankalyanc162@gmail.com
1	saadiyashaik13@gmail.com
2	r190311@rguktrkv.ac.in
3	r190266@rguktrkv.ac.in
4	r190411@rguktrkv.ac.in

	College Name	State
Gender \		
0	RGUKT RK-VALLEY	Andhra Pradesh
Male		
1	Rgukt,r.k.valley	Andhra Pradesh
Female		
2	IIIT RK VALLEY	NaN
Female		
3	RK Valley	NaN
Male		
4	Rajiv Gandhi University of Knowledge Technolog...	NaN
Female		

	Date of Birth	Study Year	\
0	12/17/2003	Enng-3	
1	7/13/2003	Enng-3	
2	7/29/2004	Enng-3	
3	8/19/2004	Enng-3	
4	6/10/2004	Enng-3	

Which of the following sources of stress are most significant in your life? (Select all that apply) \

0	Family, Relationship, Health
1	Acedamics
2	Acedamics
3	Work, Acedamics, Relationship, Financial
4	Acedamics, Relationship, Financial, Health

... You feel, your life is sad, as there is no joy in your life anymore \

0	...	Completely agree
1	...	Completely disagree
2	...	Completely disagree
3	...	Completely disagree
4	...	Neutral

You have been very irritated and angry recently and having mood swings \

0	Completely agree
1	Neutral
2	Neutral
3	Neutral
4	Neutral

Little interest or pleasure in doing things, you enjoy or Feel to have less interaction with Social network. \

0	Yes
---	-----

1	Yes
2	Yes
3	Yes
4	Yes

Do you observed changes in food habits? \

0	No
1	Yes
2	Yes
3	No
4	No

How often do you experience trouble sleeping \

0	Frequently
1	Rarely
2	Never
3	Never
4	Rarely

Do you often experience physical symptoms like headaches or muscle tension when stressed? \

0	Frequently
1	Occassionally
2	Never
3	Rarely
4	Occassionally

View of yourself? \

0	You see yourself as equally worthwhile as others
1	You see yourself as equally worthwhile as others
2	You see yourself as equally worthwhile as others
3	You see yourself as equally worthwhile as others
4	You see yourself as equally worthwhile as others

Thoughts that you would be better off dead, or of hurting yourself in some way? \

0	Completely agree
1	Completely disagree
2	Completely disagree

3	Somewhat agree
4	Somewhat agree

How would you rate your overall stress level on a scale from 1 (low) to 5 (high) [Stress Level] \

0	5
1	1
2	3
3	2
4	3

Overall, do you believe that stress significantly affects your daily life and well-being?

0	Yes, significantly
1	Yes, to some extent
2	Yes, significantly
3	No, not at all
4	Yes, significantly

[5 rows x 22 columns]

df.columns

```
Index(['Timestamp', 'Email Address', ' Name', 'Email', 'College Name',
      'State',
      'Gender', 'Date of Birth', 'Study Year',
      'Which of the following sources of stress are most significant
in your life? (Select all that apply) ',
      'Are you facing a lack of concentration. ',
      'Are you facing problems with making decisions ? ',
      'You feel, your life is sad, as there is no joy in your life
anymore ',
      'You have been very irritated and angry recently and having
mood swings ',
      'Little interest or pleasure in doing things, you enjoy or Feel
to have less interaction with Social network. ',
      'Do you observed changes in food habits?',
      'How often do you experience trouble sleeping ',
      ' Do you often experience physical symptoms like headaches or
```

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muscle tension when stressed? ',
    'View of yourself?',
    'Thoughts that you would be better off dead, or of hurting
yourself in some way? ',
    'How would you rate your overall stress level on a scale from 1
(low) to 5 (high) [ Stress Level]',
    'Overall, do you believe that stress significantly affects your
daily life and well-being? '],
    dtype='object')

```

```
df.info()
```

```

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 617 entries, 0 to 616
Data columns (total 22 columns):
#   Column
Non-Null Count  Dtype
---  -
0   Timestamp
617 non-null    object
1   Email Address
617 non-null    object
2   Name
617 non-null    object
3   Email
617 non-null    object
4   College Name
617 non-null    object
5   State
563 non-null    object
6   Gender
617 non-null    object
7   Date of Birth
617 non-null    object
8   Study Year
617 non-null    object
9   Which of the following sources of stress are most significant in
your life? (Select all that apply) 617 non-null    object
10  Are you facing a lack of concentration.
617 non-null    object
11  Are you facing problems with making decisions ?
617 non-null    object
12  You feel, your life is sad, as there is no joy in your life
anymore 617 non-null
object
13  You have been very irritated and angry recently and having mood
swings 617 non-null    object
14  Little interest or pleasure in doing things, you enjoy or Feel to
have less interaction with Social network. 617 non-null    object

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15 Do you observed changes in food habits?
617 non-null    object
16 How often do you experience trouble sleeping
617 non-null    object
17 Do you often experience physical symptoms like headaches or
muscle tension when stressed? 617 non-null
object
18 View of yourself?
617 non-null    object
19 Thoughts that you would be better off dead, or of hurting
yourself in some way? 617 non-null
object
20 How would you rate your overall stress level on a scale from 1
(low) to 5 (high) [ Stress Level] 617 non-null    int64
21 Overall, do you believe that stress significantly affects your
daily life and well-being? 617 non-null    object
dtypes: int64(1), object(21)
memory usage: 106.2+ KB

```

```
df.dtypes
```

```

Timestamp
object
Email Address
object
Name
object
Email
object
College Name
object
State
object
Gender
object
Date of Birth
object
Study Year
object
Which of the following sources of stress are most significant in your
life? (Select all that apply) object
Are you facing a lack of concentration.
object
Are you facing problems with making decisions ?
object
You feel, your life is sad, as there is no joy in your life anymore
object
You have been very irritated and angry recently and having mood swings
object
Little interest or pleasure in doing things, you enjoy or Feel to have

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less interaction with Social network.      object
Do you observed changes in food habits?
object
How often do you experience trouble sleeping
object
Do you often experience physical symptoms like headaches or muscle
tension when stressed?                    object
View of yourself?
object
Thoughts that you would be better off dead, or of hurting yourself in
some way?                                object
How would you rate your overall stress level on a scale from 1 (low)
to 5 (high) [ Stress Level]              int64
Overall, do you believe that stress significantly affects your daily
life and well-being?                      object
dtype: object

```

Exploratory Data Analysis

```

df.drop(['Timestamp', 'Email Address', 'College
Name', 'State'],axis=1,inplace=True)

```

```
df.head()
```

	Name	Email	Gender	Date of Birth \
0	Pavan Kalyan	pavankalyanc162@gmail.com	Male	12/17/2003
1	Shaik Haleema saadiya	saadiyashaik13@gmail.com	Female	7/13/2003
2	Swetha	r190311@rguktrkv.ac.in	Female	7/29/2004
3	Chandu	r190266@rguktrkv.ac.in	Male	8/19/2004
4	G.Praharsha	r190411@rguktrkv.ac.in	Female	6/10/2004

	Study Year \
0	Enng-3
1	Enng-3
2	Enng-3
3	Enng-3
4	Enng-3

```

Which of the following sources of stress are most significant in
your life? (Select all that apply) \
0      Family, Relationship, Health

```

- 1 Acedamics
- 2 Acedamics
- 3 Work, Acedamics, Relationship, Financial
- 4 Acedamics, Relationship, Financial, Health

Are you facing a lack of concentration. \

- 0 Completely agree
- 1 Neutral
- 2 Somewhat agree
- 3 Somewhat agree
- 4 Completely agree

Are you facing problems with making decisions ? \

- 0 Completely agree
- 1 Completely disagree
- 2 Somewhat agree
- 3 Completely agree
- 4 Completely agree

You feel, your life is sad, as there is no joy in your life anymore

- \
- 0 Completely agree
 - 1 Completely disagree
 - 2 Completely disagree
 - 3 Completely disagree
 - 4 Neutral

You have been very irritated and angry recently and having mood swings \

- 0 Completely agree
- 1 Neutral
- 2 Neutral
- 3 Neutral
- 4 Neutral

Little interest or pleasure in doing things, you enjoy or Feel to have less interaction with Social network. \

0	Yes
1	Yes
2	Yes
3	Yes
4	Yes

Do you observed changes in food habits? \

0	No
1	Yes
2	Yes
3	No
4	No

How often do you experience trouble sleeping \

0	Frequently
1	Rarely
2	Never
3	Never
4	Rarely

Do you often experience physical symptoms like headaches or muscle tension when stressed? \

0	Frequently
1	Occasionally
2	Never
3	Rarely
4	Occasionally

View of yourself? \

0	You see yourself as equally worthwhile as others
1	You see yourself as equally worthwhile as others
2	You see yourself as equally worthwhile as others
3	You see yourself as equally worthwhile as others
4	You see yourself as equally worthwhile as others

Thoughts that you would be better off dead, or of hurting yourself in some way? \

0	Completely agree
1	Completely disagree

2	Completely disagree
---	---------------------

3	Somewhat agree
---	----------------

4	Somewhat agree
---	----------------

How would you rate your overall stress level on a scale from 1 (low) to 5 (high) [Stress Level] \

0	5
---	---

1	1
---	---

2	3
---	---

3	2
---	---

4	3
---	---

Overall, do you believe that stress significantly affects your daily life and well-being?

0	Yes, significantly
---	--------------------

1	Yes, to some extent
---	---------------------

2	Yes, significantly
---	--------------------

3	No, not at all
---	----------------

4	Yes, significantly
---	--------------------

df.columns

```
Index([' Name', 'Email', 'Gender', 'Date of Birth', 'Study Year',
```

```
      'Which of the following sources of stress are most significant  
in your life? (Select all that apply) ',
```

```
      'Are you facing a lack of concentration. ',
```

```
      'Are you facing problems with making decisions ? ',
```

```
      'You feel, your life is sad, as there is no joy in your life  
anymore ',
```

```
      'You have been very irritated and angry recently and having  
mood swings ',
```

```
      'Little interest or pleasure in doing things, you enjoy or Feel  
to have less interaction with Social network. ',
```

```
      'Do you observed changes in food habits?',
```

```
      'How often do you experience trouble sleeping ',
```

```
      ' Do you often experience physical symptoms like headaches or  
muscle tension when stressed? ',
```

```
      'View of yourself',
```

```

    'Thoughts that you would be better off dead, or of hurting
yourself in some way? ',
    'How would you rate your overall stress level on a scale from 1
(low) to 5 (high) [ Stress Level]',
    'Overall, do you believe that stress significantly affects your
daily life and well-being? '],
    dtype='object')

```

```
df.shape
```

```
(617, 18)
```

```
df.isnull().sum()
```

```

Name
0
Email
0
Gender
0
Date of Birth
0
Study Year
0
Which of the following sources of stress are most significant in your
life? (Select all that apply) 0
Are you facing a lack of concentration.
0
Are you facing problems with making decisions ?
0
You feel, your life is sad, as there is no joy in your life anymore
0
You have been very irritated and angry recently and having mood swings
0
Little interest or pleasure in doing things, you enjoy or Feel to have
less interaction with Social network. 0
Do you observed changes in food habits?
0
How often do you experience trouble sleeping
0
Do you often experience physical symptoms like headaches or muscle
tension when stressed? 0
View of yourself?
0
Thoughts that you would be better off dead, or of hurting yourself in
some way? 0
How would you rate your overall stress level on a scale from 1 (low)
to 5 (high) [ Stress Level] 0
Overall, do you believe that stress significantly affects your daily

```

```

life and well-being?                                0
dtype: int64

df.duplicated()

0      False
1      False
2      False
3      False
4      False
...
612     False
613     False
614     False
615     False
616     False
Length: 617, dtype: bool

df.duplicated().sum()

0

df['Study Year'].unique()

array(['Enng-3', 'Degree-3', 'Enng-2', 'Inter Second Year/P2', 'Enng-1',
      'Enng-4', 'Inter First Year/P1', 'Diploma-3', 'Degree-1',
      'Degree-2'], dtype=object)

df['Study Year'].nunique()

10

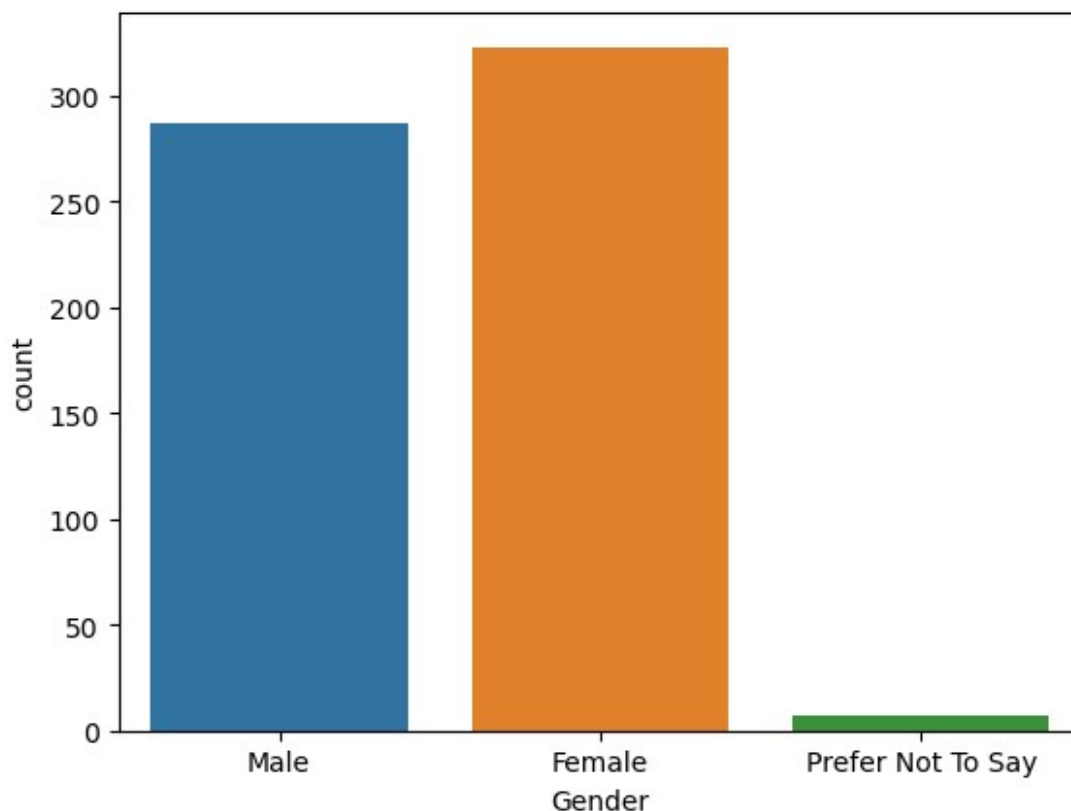
df.Gender.value_counts()

Female      323
Male        287
Prefer Not To Say    7
Name: Gender, dtype: int64

sns.countplot(df.Gender)
plt.show()

C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\
_decorators.py:36: FutureWarning: Pass the following variable as a
keyword arg: x. From version 0.12, the only valid positional argument
will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
  warnings.warn(

```



```
df["Date of Birth"].unique()
array(['12/17/2003', '7/13/2003', '7/29/2004', '8/19/2004',
      '6/10/2004',
      '9/17/2003', '6/13/2004', '5/3/2004', '1/9/1999', '10/10/2002',
      '10/30/2004', '3/27/2004', '4/25/2004', '9/10/2003',
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      '6/5/2007', '12/16/2002', '5/30/2005', '4/24/2006',
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      '11/4/2003', '7/5/2004', '9/11/2023', '10/21/2003',
      '7/28/2004',
      '12/11/2003', '7/6/2023', '12/3/2006', '9/29/2023',
      '11/24/2003',
      '4/30/2003', '10/9/2003', '3/10/2004', '7/1/2023',
      '11/26/2002',
      '4/24/2003', '11/22/2005', '6/30/2005', '9/22/2006',
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      '5/18/2004', '1/4/2004', '1/20/2002', '2/15/2005', '9/15/2003',
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      '9/29/2004',
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'1/24/2006', '12/6/2005', '12/4/2004', '10/16/2003',
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'8/2/2004', '11/24/2002', '2/14/2004', '4/3/2003', '1/16/2004',
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'7/16/2007',
'9/18/2007', '5/28/2006', '6/10/2007', '1/3/2006',
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'10/3/2005',
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'6/26/2004', '9/2/2003', '7/21/2005', '9/14/2005', '3/17/2005',

'12/6/2003', '6/18/2004', '7/26/2005', '4/17/2005',
'5/13/2003',
'8/1/2005', '6/14/2005', '6/16/2005', '10/24/2004', '4/1/2003',
'10/29/2005', '4/19/2004', '1/8/2004', '2/19/2005',
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'8/11/2005', '7/11/2005', '8/23/2004', '1/24/2005',
'5/13/2005',
'9/18/2004', '12/21/2004', '6/2/2004', '3/5/2007', '5/6/2005',
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'9/28/2006', '5/27/2006', '6/15/2007', '2/3/2004',
'11/16/2005',
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'10/16/2006',
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'2/12/2007',
'9/25/2006', '7/7/2007', '2/5/2005', '5/24/2006', '8/13/2023',
'1/23/2007', '7/29/2006', '5/8/2007', '4/15/2007',
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'3/31/2005',
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'5/23/2006', '9/9/2006', '11/21/2005', '11/19/2005',
'3/13/2006',
'9/10/2005', '10/26/2005', '11/28/2006', '11/5/2006',
'1/5/2007',
'11/15/2005', '2/3/2006', '4/10/2007', '10/6/2006',

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'7/30/2007',
    '12/28/2005', '10/7/2003', '2/3/2005', '8/21/2005',
'8/10/2005',
    '12/5/2006', '1/29/2006', '5/24/2007', '1/1/2006',
'11/11/2007',
    '9/11/2007', '12/3/2005', '9/3/2006', '6/12/2007', '1/17/2007',
    '12/19/2006', '8/17/2007', '5/6/2006', '9/27/2007',
'10/28/2006',
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'1/17/2006',
    '2/11/2006', '11/16/2006', '3/29/2006', '1/30/2006',
'11/26/2006',
    '10/23/2005', '8/24/2005', '10/14/2006', '9/20/2005',
'4/29/2004',
    '3/5/2006', '1/7/2006', '6/30/2007', '4/8/2006', '12/22/2006',
    '6/24/2007', '7/1/2006', '9/8/2005', '10/10/2006', '7/30/2006',
    '9/6/2003', '4/6/2007', '1/1/2005', '8/16/2006', '5/11/2006',
    '1/4/2007', '10/20/2007', '6/10/2005', '1/11/2006', '7/2/2008',
    '8/5/2023', '11/21/2006', '10/17/2006', '7/24/2007',
'8/3/2007',
    '7/21/2006', '12/6/2006', '12/4/2005', '5/1/2007', '6/5/2006',
    '3/24/2007', '6/11/2004', '1/28/2008', '7/17/2006',
'3/18/2006',
    '1/24/2007', '8/29/2006', '1/29/2007', '6/22/2003',
'1/18/2003',
    '5/24/2003', '8/21/2004', '12/28/2003', '8/30/2005',
'5/3/2003',
    '10/4/2003', '9/18/2003', '10/17/2003', '10/4/2023',
'10/17/2023',
    '1/9/2003', '3/11/2003', '6/4/2004', '9/7/2003', '4/24/2004',
    '11/22/2006', '4/7/2006', '5/10/2007', '12/12/2006',
'7/7/2006',
    '7/15/2006', '1/28/2007', '2/13/2003', '5/9/2006', '5/30/2007',
    '5/17/2008', '10/29/2006', '3/4/2007', '3/3/2007',
'10/13/2007',
    '8/6/2008', '4/14/2008', '10/7/2009', '10/18/2005',
'8/13/2006',
    '10/19/2007', '7/25/2006', '3/29/2008', '6/6/2007', '4/9/2023',
    '9/2/2007', '12/28/2007', '6/16/2008', '4/17/2007',
'4/25/2007',
    '12/18/2004', '6/26/2007', '3/6/2008', '6/3/2008', '1/3/2007',
    '11/8/2007', '1/16/2007'], dtype=object)

```

```
df["Date of Birth"].dtypes
```

```
dtype('O')
```

```
df["Date of Birth"] = pd.to_datetime(df["Date of Birth"],
errors='coerce')
```



```

df["Date of Birth"].dtypes
dtype('<M8[ns]')

from datetime import datetime
present=datetime.now().year
df['Age']=present-df['Date of Birth'].dt.year

df['Age'].unique()

array([21., 20., 25., 22., 17., 19., 18., 1., 16., 24., 23., 2.,
nan,
      15.])

# Assuming df is your DataFrame
df = df[~((df['Age'] == 0) | (df['Age'] == 1))]

df['Age'].unique()

array([21., 20., 25., 22., 17., 19., 18., 16., 24., 23., 2., nan,
      15.])

df.isnull().sum()

Name
0
Email
0
Gender
0
Date of Birth
2
Study Year
0
Which of the following sources of stress are most significant in your
life? (Select all that apply) 0
Are you facing a lack of concentration.
0
Are you facing problems with making decisions ?
0
You feel, your life is sad, as there is no joy in your life anymore
0
You have been very irritated and angry recently and having mood swings
0
Little interest or pleasure in doing things, you enjoy or Feel to have
less interaction with Social network. 0
Do you observed changes in food habits?
0
How often do you experience trouble sleeping
0
Do you often experience physical symptoms like headaches or muscle

```

```

tension when stressed?                                0
View of yourself?
0
Thoughts that you would be better off dead, or of hurting yourself in
some way?                                             0
How would you rate your overall stress level on a scale from 1 (low)
to 5 (high) [ Stress Level]                          0
Overall, do you believe that stress significantly affects your daily
life and well-being?                                  0
Age
2
dtype: int64

df.dropna(inplace=True)

df.isnull().sum()

Name
0
Email
0
Gender
0
Date of Birth
0
Study Year
0
Which of the following sources of stress are most significant in your
life? (Select all that apply)                        0
Are you facing a lack of concentration.
0
Are you facing problems with making decisions ?
0
You feel, your life is sad, as there is no joy in your life anymore
0
You have been very irritated and angry recently and having mood swings
0
Little interest or pleasure in doing things, you enjoy or Feel to have
less interaction with Social network.                0
Do you observed changes in food habits?
0
How often do you experience trouble sleeping
0
Do you often experience physical symptoms like headaches or muscle
tension when stressed?                                0
View of yourself?
0
Thoughts that you would be better off dead, or of hurting yourself in
some way?                                             0
How would you rate your overall stress level on a scale from 1 (low)

```

```

to 5 (high) [ Stress Level]          0
Overall, do you believe that stress significantly affects your daily
life and well-being?                0
Age
0
dtype: int64

df.shape

(587, 19)

df.columns

Index([' Name', 'Email', 'Gender', 'Date of Birth', 'Study Year',
      'Which of the following sources of stress are most significant
in your life? (Select all that apply) ',
      'Are you facing a lack of concentration. ',
      'Are you facing problems with making decisions ? ',
      'You feel, your life is sad, as there is no joy in your life
anymore ',
      'You have been very irritated and angry recently and having
mood swings ',
      'Little interest or pleasure in doing things, you enjoy or Feel
to have less interaction with Social network. ',
      'Do you observed changes in food habits?',
      'How often do you experience trouble sleeping ',
      ' Do you often experience physical symptoms like headaches or
muscle tension when stressed? ',
      'View of yourself?',
      'Thoughts that you would be better off dead, or of hurting
yourself in some way? ',
      'How would you rate your overall stress level on a scale from 1
(low) to 5 (high) [ Stress Level]',
      'Overall, do you believe that stress significantly affects your
daily life and well-being? ',
      'Age'],
      dtype='object')

```

Grouping the data based on Stress Reasons

```

df1=df.groupby('Which of the following sources of stress are most
significant in your life? (Select all that apply) ' )

df1.apply(lambda x: x.head())

Name \
Which of the following sources of stress are mo...

```

Acedamics	1	Shaik Haleema
saadiya	2	
Swetha	5	
Jagathi Sri	15	Harshitha
Suryakumar	16	K
Surya Teja		
...		
...		
Work, Health	603	Charan
Sai Teja		
Work, Relationship	280	
K.SREEJA	334	SAKE GOUTHAM
MATHUR	514	
Gnaneshwar		
Work, Relationship, Financial	242	MADHU
VARDHAN		
Email \		
Which of the following sources of stress are mo...		
Acedamics	1	
saadiyashaik13@gmail.com	2	
r190311@rguktrkv.ac.in	5	
jagathisri9059@gmail.com	15	
Www.harshithasuryakumar@gmail.com	16	
r190528@rguktrkv.ac.in		
...		
...		
Work, Health	603	
charansaitejaummadisetty@gmail.com		
Work, Relationship	280	
rr200816@rguktrkv.ac.in	334	
gouthammathur1537@gmail.com	514	
gnaneshwarmada@gmail.com		
Work, Relationship, Financial	242	
rr200568@rguktrkv.ac.in		

Birth \		Gender	Date of
Which of the following sources of stress are mo...			
Acedamics	1	Female	
2003-07-13			
	2	Female	
2004-07-29			
	5	Female	
2003-09-17			
	15	Female	
2007-06-05			
	16	Male	
2002-12-16			
...			...
...			
Work, Health	603	Male	
2007-04-17			
Work, Relationship	280	Female	
2004-08-23			
	334	Male	
2007-08-09			
	514	Male	
2008-07-02			
Work, Relationship, Financial	242	Male	
2004-12-14			
Study Year \			
Which of the following sources of stress are mo...			
Acedamics	1		
Enng-3			
	2		
Enng-3			
	5		
Enng-3			
	15	Inter	Second
Year/P2			
	16		
Enng-3			
...			
...			
Work, Health	603	Inter	First
Year/P1			
Work, Relationship	280		
Enng-2			
	334	Inter	Second
Year/P2			
	514	Inter	Second

Year/P2	
Work, Relationship, Financial	242
Enng-2	

Which of the following sources of stress are most significant in your life? (Select all that apply) \

Which of the following sources of stress are mo...

Acedamics	1
Acedamics	2
Acedamics	5
Acedamics	15
Acedamics	16
Acedamics	
...	
...	
Work, Health	603
Work, Health	
Work, Relationship	280
Work, Relationship	
	334
Work, Relationship	
	514
Work, Relationship	
Work, Relationship, Financial	242
Work, Relationship, Financial	

Are you facing a lack of concentration. \

Which of the following sources of stress are mo...

Acedamics	1
Neutral	2
Somewhat agree	5
Somewhat agree	15
Somewhat agree	16
Somewhat agree	

...	
...	
Work, Health	603
Completely agree	
Work, Relationship	280
Somewhat agree	
	334
Somewhat agree	
	514
Somewhat agree	
Work, Relationship, Financial	242
Completely disagree	

Are you facing
problems with making decisions ? \

Which of the following sources of stress are mo...

Acedamics	1
Completely disagree	
	2
Somewhat agree	
	5
Neutral	
	15
Completely agree	
	16
Completely disagree	

...	
...	
Work, Health	603
Somewhat agree	
Work, Relationship	280
Completely agree	
	334
Completely agree	
	514
Somewhat agree	
Work, Relationship, Financial	242
Somewhat agree	

You feel, your
life is sad, as there is no joy in your life anymore \

Which of the following sources of stress are mo...

Acedamics	1
Completely disagree	
	2
Completely disagree	
	5
Somewhat agree	

Completely disagree	15
Completely disagree	16
...	
...	
Work, Health	603
Completely agree	
Work, Relationship	280
Somewhat agree	
	334
Completely disagree	
	514
Somewhat agree	
Work, Relationship, Financial	242
Completely disagree	

You have been
very irritated and angry recently and having mood swings \

Which of the following sources of stress are mo...

Acedamics	1
Neutral	
	2
Neutral	
	5
Neutral	
	15
Somewhat agree	
	16
Completely disagree	
...	
...	
Work, Health	603
Completely agree	
Work, Relationship	280
Somewhat agree	
	334
Neutral	
	514
Completely disagree	
Work, Relationship, Financial	242
Completely agree	

Little interest
or pleasure in doing things, you enjoy or Feel to have less
interaction with Social network. \

Which of the following sources of stress are mo...

Acedamics	1
-----------	---

Yes	
	2
Yes	
	5
No	
	15
No	
	16
Yes	
...	
...	
Work, Health	603
Yes	
Work, Relationship	280
Yes	
	334
Yes	
	514
Yes	
Work, Relationship, Financial	242
Yes	
Do you observed	
changes in food habits? \	
Which of the following sources of stress are mo...	
Acedamics	1
Yes	
	2
Yes	
	5
Yes	
	15
No	
	16
No	
...	
...	
Work, Health	603
Yes	
Work, Relationship	280
No	
	334
Yes	
	514
No	
Work, Relationship, Financial	242
Yes	
How often do	

you experience trouble sleeping \

Which of the following sources of stress are mo...

Acedamics	1
Rarely	2
Never	5
Rarely	15
Rarely	16
Never	
...	
...	
Work, Health	603
Frequently	
Work, Relationship	280
Rarely	334
Never	514
Rarely	
Work, Relationship, Financial	242
Frequently	

Do you often

experience physical symptoms like headaches or muscle tension when

stressed? \

Which of the following sources of stress are mo...

Acedamics	1
Occassionally	2
Never	5
Occassionally	15
Never	16
Rarely	
...	
...	
Work, Health	603
Frequently	
Work, Relationship	280
Rarely	334
Never	514

Never	
Work, Relationship, Financial	242
Occasionally	

View of yourself? \

Which of the following sources of stress are mo...

Acedamics	1	You see
yourself as equally worthwhile as others		
	2	You see
yourself as equally worthwhile as others		
	5	You see
yourself as equally worthwhile as others		
self blaming ,for every mistakes...	15	You Feel more
yourself as equally worthwhile as others	16	You see
...		
...		
Work, Health	603	You Feel more
self blaming ,for every mistakes...		
Work, Relationship	280	You see
yourself as equally worthwhile as others		
	334	You Feel more
self blaming ,for every mistakes...		
	514	You Feel more
self blaming ,for every mistakes...		
Work, Relationship, Financial	242	You Feel more
self blaming ,for every mistakes...		

Thoughts that

you would be better off dead, or of hurting yourself in some way? \

Which of the following sources of stress are mo...

Acedamics	1
Completely disagree	
	2
Completely disagree	
	5
Completely disagree	
	15
Completely disagree	
	16
Completely disagree	
...	
...	
Work, Health	603
Completely agree	
Work, Relationship	280

Completely disagree	334
Completely disagree	514
Somewhat agree	242
Work, Relationship, Financial	
Somewhat agree	

How would you
rate your overall stress level on a scale from 1 (low) to 5 (high)
[Stress Level] \

Which of the following sources of stress are mo...

Acedamics	1
1	2
3	5
3	15
3	16
2	
...	
...	
Work, Health	603
3	
Work, Relationship	280
3	334
2	514
3	
Work, Relationship, Financial	242
4	

Overall, do you
believe that stress significantly affects your daily life and well-
being? \

Which of the following sources of stress are mo...

Acedamics	1
Yes, to some extent	2
Yes, significantly	5
Yes, significantly	15
Yes, significantly	16

No, not at all	
...	
...	
Work, Health	603
Yes, significantly	
Work, Relationship	280
Yes, significantly	
	334
No, not at all	
	514
No, not at all	
Work, Relationship, Financial	242
Yes, significantly	

		Age
Which of the following sources of stress are mo...		
Acedamics	1	21.0
	2	20.0
	5	21.0
	15	17.0
	16	22.0
...		...
Work, Health	603	17.0
Work, Relationship	280	20.0
	334	17.0
	514	16.0
Work, Relationship, Financial	242	20.0

[191 rows x 19 columns]

```
# Assuming df1 is your DataFrameGroupBy object
c=0
for name, group in df1:
    print(f"Group: {name}")
    c=c+1
print("Total No of Groups formed",c)

Group: Acedamics
Group: Acedamics, Financial
Group: Acedamics, Financial, Health
Group: Acedamics, Health
Group: Acedamics, Relationship
Group: Acedamics, Relationship, Financial
Group: Acedamics, Relationship, Financial, Health
Group: Acedamics, Relationship, Health
Group: Family
Group: Family, Acedamics
Group: Family, Acedamics, Financial
Group: Family, Acedamics, Financial, Health
Group: Family, Acedamics, Health
```

Group: Family, Acedamics, Relationship
 Group: Family, Acedamics, Relationship, Financial
 Group: Family, Acedamics, Relationship, Financial, Health
 Group: Family, Financial
 Group: Family, Financial, Health
 Group: Family, Health
 Group: Family, Relationship
 Group: Family, Relationship, Financial
 Group: Family, Relationship, Financial, Health
 Group: Family, Relationship, Health
 Group: Family, Work
 Group: Family, Work, Acedamics
 Group: Family, Work, Acedamics, Financial, Health
 Group: Family, Work, Acedamics, Health
 Group: Family, Work, Acedamics, Relationship
 Group: Family, Work, Acedamics, Relationship, Financial, Health
 Group: Family, Work, Acedamics, Relationship, Health
 Group: Family, Work, Financial
 Group: Family, Work, Financial, Health
 Group: Family, Work, Health
 Group: Family, Work, Relationship
 Group: Family, Work, Relationship, Financial, Health
 Group: Financial
 Group: Financial, Health
 Group: Health
 Group: Relationship
 Group: Relationship, Financial
 Group: Relationship, Financial, Health
 Group: Relationship, Health
 Group: Work
 Group: Work, Acedamics
 Group: Work, Acedamics, Financial
 Group: Work, Acedamics, Financial, Health
 Group: Work, Acedamics, Health
 Group: Work, Acedamics, Relationship
 Group: Work, Acedamics, Relationship, Financial
 Group: Work, Financial
 Group: Work, Financial, Health
 Group: Work, Health
 Group: Work, Relationship
 Group: Work, Relationship, Financial
 Total No of Groups formed 54

```

group_sizes = df1.size()
print(group_sizes)

```

Which of the following sources of stress are most significant in your life? (Select all that apply)

Acedamics	157
Acedamics, Financial	23

Acedamics, Financial, Health	10
Acedamics, Health	17
Acedamics, Relationship	15
Acedamics, Relationship, Financial	10
Acedamics, Relationship, Financial, Health	5
Acedamics, Relationship, Health	3
Family	20
Family, Acedamics	18
Family, Acedamics, Financial	17
Family, Acedamics, Financial, Health	4
Family, Acedamics, Health	12
Family, Acedamics, Relationship	9
Family, Acedamics, Relationship, Financial	2
Family, Acedamics, Relationship, Financial, Health	1
Family, Financial	7
Family, Financial, Health	9
Family, Health	3
Family, Relationship	5
Family, Relationship, Financial	2
Family, Relationship, Financial, Health	2
Family, Relationship, Health	2
Family, Work	1
Family, Work, Acedamics	5
Family, Work, Acedamics, Financial, Health	3
Family, Work, Acedamics, Health	5
Family, Work, Acedamics, Relationship	2
Family, Work, Acedamics, Relationship, Financial, Health	24
Family, Work, Acedamics, Relationship, Health	1
Family, Work, Financial	1
Family, Work, Financial, Health	1
Family, Work, Health	2
Family, Work, Relationship	2
Family, Work, Relationship, Financial, Health	1
Financial	32
Financial, Health	3
Health	25
Relationship	14
Relationship, Financial	6
Relationship, Financial, Health	2
Relationship, Health	3
Work	37
Work, Acedamics	29
Work, Acedamics, Financial	10
Work, Acedamics, Financial, Health	5
Work, Acedamics, Health	1
Work, Acedamics, Relationship	3
Work, Acedamics, Relationship, Financial	3
Work, Financial	3
Work, Financial, Health	1

Work, Health	5
Work, Relationship	3
Work, Relationship, Financial	1

dtype: int64

```
group_sizes_df = df1.size().reset_index(name='Group Size')
```

```
# Find the row with the maximum size
```

```
max_group_row = group_sizes_df[group_sizes_df['Group Size'] ==  
group_sizes_df['Group Size'].max()]
```

```
# Display the row with the maximum size
```

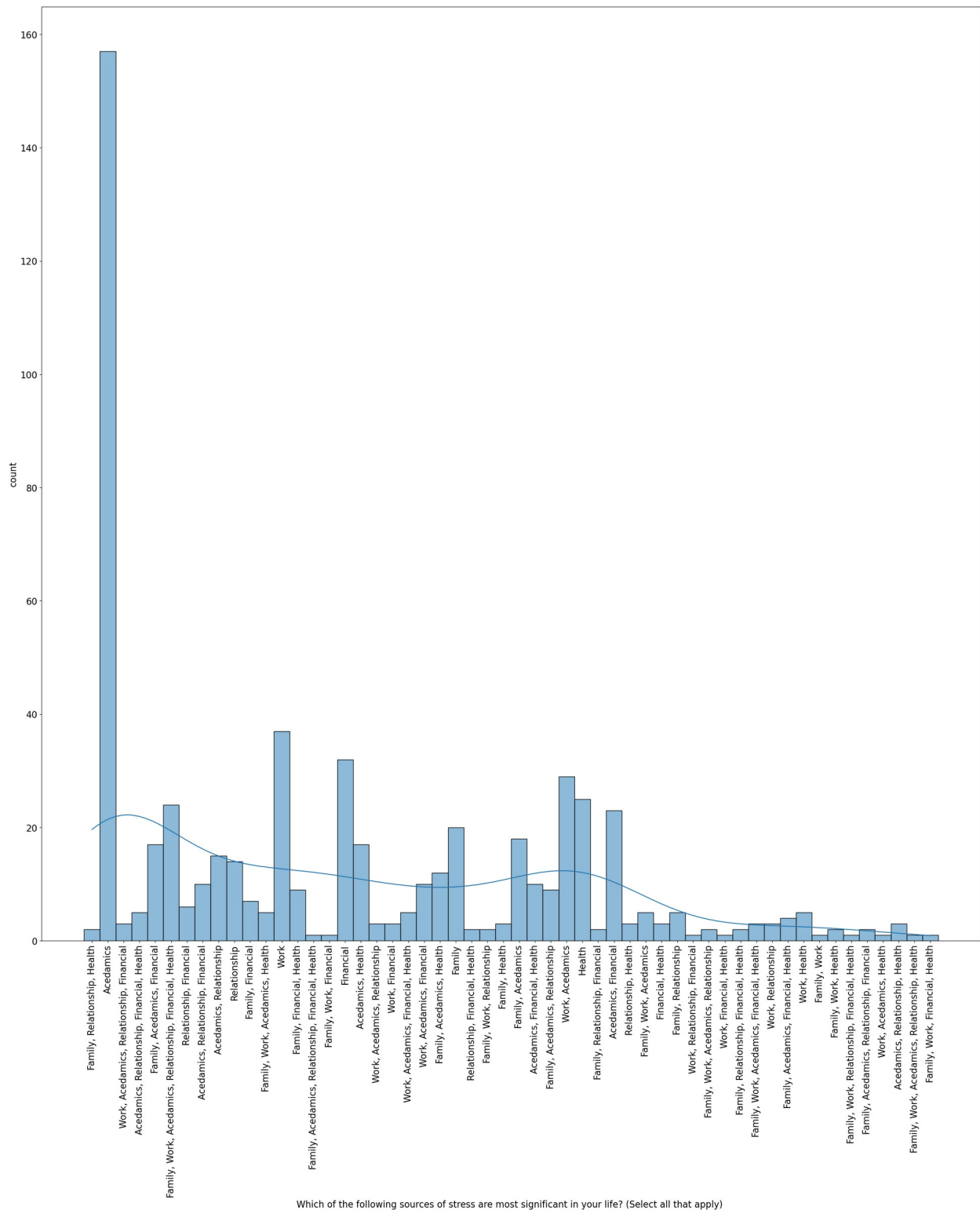
```
max_group_row
```

Which of the following sources of stress are most significant in your life? (Select all that apply) \

0 Acedamics

	Group Size
0	157

```
plt.figure(figsize=(30,30))  
a=df['Which of the following sources of stress are most significant in  
your life? (Select all that apply) ' ]  
sns.histplot(a,kde=True)  
plt.xticks(rotation=90)  
plt.tick_params(axis='x', labelsz=16)  
plt.tick_params(axis='y', labelsz=16)  
plt.xlabel('Which of the following sources of stress are most  
significant in your life? (Select all that apply) ', fontsize=16)  
plt.ylabel('count',fontsz=16)  
plt.show()
```

- From above analysis we can observe that many students feeling stress from Academics

```
Acedamics_df=df1.get_group('Acedamics')
```

```
Acedamics_df.shape
```

```
(157, 19)
```

```
Acedamics_df.Gender.value_counts()
```

```
Female    105
```

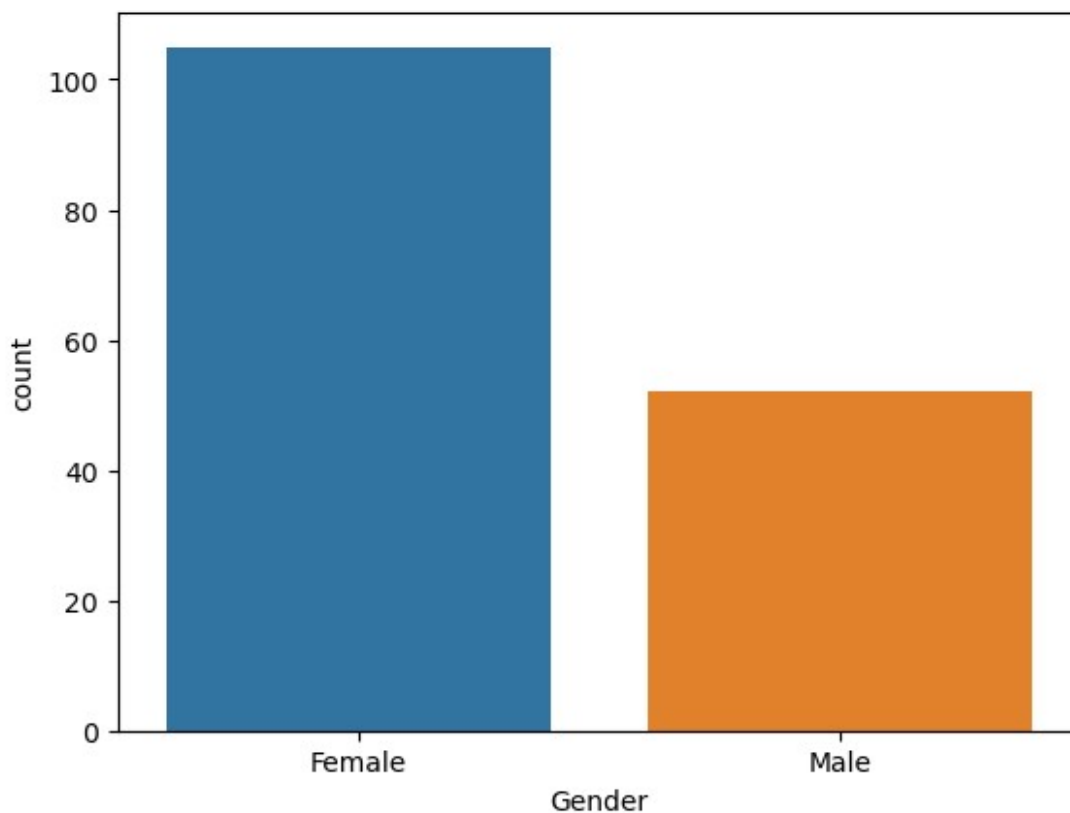
```
Male      52
```

```
Name: Gender, dtype: int64
```

```
sns.countplot(Acedamics_df.Gender)
```

```
plt.show()
```

```
C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\
_decorators.py:36: FutureWarning: Pass the following variable as a
keyword arg: x. From version 0.12, the only valid positional argument
will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
  warnings.warn(
```



- From above analysis we can observe that, females are experiencing more stress because of Acedamics.

```
df.Age.unique()
```

```
array([21., 20., 25., 22., 17., 19., 18., 16., 24., 23., 2., 15.] )
```

```
# Replace 'Age' with the actual column name from your DataFrame
df2=df.copy()
bins = [10, 12, 14, 16, 18, 20, 25] # Define your desired age ranges
labels = ['10-12', '12-14', '14-16', '16-18', '18-20', '20-25'] #
Labels for the age ranges

df2['Age'] = pd.cut(df['Age'], bins=bins, labels=labels, right=False)

# Now df['Age Range'] contains the age ranges for each entry
df2.head()
```

	Name	Email	Gender	Date of Birth \
0	Pavan Kalyan	pavankalyanc162@gmail.com	Male	2003-12-17
1	Shaik Haleema saadiya	saadiyashaik13@gmail.com	Female	2003-07-13
2	Swetha	r190311@rguktrkv.ac.in	Female	2004-07-29
3	Chandu	r190266@rguktrkv.ac.in	Male	2004-08-19
4	G.Praharsha	r190411@rguktrkv.ac.in	Female	2004-06-10

	Study Year \
0	Enng-3
1	Enng-3
2	Enng-3
3	Enng-3
4	Enng-3

Which of the following sources of stress are most significant in your life? (Select all that apply) \

0	Family, Relationship, Health
1	Acedamics
2	Acedamics
3	Work, Acedamics, Relationship, Financial
4	Acedamics, Relationship, Financial, Health

	Are you facing a lack of concentration. \
0	Completely agree
1	Neutral
2	Somewhat agree
3	Somewhat agree
4	Completely agree

Are you facing problems with making decisions ? \

- 0 Completely agree
- 1 Completely disagree
- 2 Somewhat agree
- 3 Completely agree
- 4 Completely agree

You feel, your life is sad, as there is no joy in your life anymore

- \
- 0 Completely agree
 - 1 Completely disagree
 - 2 Completely disagree
 - 3 Completely disagree
 - 4 Neutral

You have been very irritated and angry recently and having mood swings \

- 0 Completely agree
- 1 Neutral
- 2 Neutral
- 3 Neutral
- 4 Neutral

Little interest or pleasure in doing things, you enjoy or Feel to have less interaction with Social network. \

- 0 Yes
- 1 Yes
- 2 Yes
- 3 Yes
- 4 Yes

Do you observed changes in food habits? \

- 0 No
- 1 Yes
- 2 Yes

3	No
4	No

How often do you experience trouble sleeping \	
0	Frequently
1	Rarely
2	Never
3	Never
4	Rarely

Do you often experience physical symptoms like headaches or muscle tension when stressed? \	
0	Frequently
1	Occasionally
2	Never
3	Rarely
4	Occasionally

View of yourself? \	
0	You see yourself as equally worthwhile as others
1	You see yourself as equally worthwhile as others
2	You see yourself as equally worthwhile as others
3	You see yourself as equally worthwhile as others
4	You see yourself as equally worthwhile as others

Thoughts that you would be better off dead, or of hurting yourself in some way? \	
0	Completely agree
1	Completely disagree
2	Completely disagree
3	Somewhat agree
4	Somewhat agree

How would you rate your overall stress level on a scale from 1 (low) to 5 (high) [Stress Level] \	
0	5
1	1
2	3

3	2
4	3

Overall, do you believe that stress significantly affects your daily life and well-being? \

0	Yes, significantly
1	Yes, to some extent
2	Yes, significantly
3	No, not at all
4	Yes, significantly

	Age
0	20-25
1	20-25
2	20-25
3	20-25
4	20-25

```
df2.Age.unique()
```

```
['20-25', NaN, '16-18', '18-20', '14-16']
Categories (6, object): ['10-12' < '12-14' < '14-16' < '16-18' < '18-20' < '20-25']
```

```
group_by_age=df2.groupby('Age')
```

```
group_sizes_df = group_by_age.size().reset_index(name='Group Size')
```

```
# Find the row with the maximum size
```

```
max_group_row = group_sizes_df[group_sizes_df['Group Size'] ==
group_sizes_df['Group Size'].max()]
```

```
# Display the row with the maximum size
```

```
max_group_row
```

	Age	Group Size
4	18-20	260

```
group_sizes_df = group_by_age.size().reset_index(name='Group Size')
```

```
# Find the row with the maximum size
```

```
max_group_row = group_sizes_df[group_sizes_df['Group Size'] ==
group_sizes_df['Group Size'].min()]
```

```
# Display the row with the maximum size
max_group_row
```

```

      Age  Group Size
0  10-12           0
1  12-14           0

```

```
group_by_age.apply(lambda x:x.head())
```

		Name	Email
\			
Age			
14-16	586	Srujankumargalipothula	babluhero712@gmail.com
16-18	15	Harshitha Suryakumar	Www.harshithasuryakumar@gmail.com
	26	SATRAVADA RAJESH	satrawadarajesh@gmail.com
	89	Koteswararao	koteswararaoperupogu1432@gmail.com
	124	G.Lahana Reddy	r220539@rguktrkv.ac.in
	126	M.Balaji Reddy	r220085@rguktrkv.ac.in
18-20	17	A.Susmitha	avukususmitha579@gmail.com
	18	Snehitha	snehithapokuru2404@gmail.com
	39	Neeraja	neeraja.kuttuboina@gmail.com
	48	Sreeja	Sriyash.gummadi@gmail.com
	49	Bonala Akhila	r210848@rguktrkv.ac.in
20-25	0	Pavan Kalyan	pavankalyanc162@gmail.com
	1	Shaik Haleema saadiya	saadiyashaik13@gmail.com
	2	Swetha	r190311@rguktrkv.ac.in
	3	Chandu	r190266@rguktrkv.ac.in
	4	G.Praharsha	r190411@rguktrkv.ac.in
		Gender Date of Birth	Study Year \

Age					
14-16	586		Male	2009-10-07	Inter First Year/P1
16-18	15		Female	2007-06-05	Inter Second Year/P2
	26		Male	2008-08-28	Inter First Year/P1
	89		Male	2007-08-10	Inter Second Year/P2
	124		Female	2007-05-14	Inter Second Year/P2
	126		Male	2007-06-02	Inter Second Year/P2
18-20	17		Female	2005-05-30	Enng-1
	18	Prefer Not	To Say	2006-04-24	Enng-1
	39		Female	2006-12-03	Inter Second Year/P2
	48		Female	2005-11-22	Enng-1
	49		Female	2005-06-30	Enng-1
20-25	0		Male	2003-12-17	Enng-3
	1		Female	2003-07-13	Enng-3
	2		Female	2004-07-29	Enng-3
	3		Male	2004-08-19	Enng-3
	4		Female	2004-06-10	Enng-3

Which of the following sources of stress are most significant in your life? (Select all that apply) \

Age

14-16	586	Family, Work, Acedamics, Relationship, Financi...
16-18	15	Acedamics
	26	Family, Work, Financial
	89	Family, Acedamics
	124	Relationship, Financial
	126	Family, Acedamics, Relationship
18-20	17	Acedamics
	18	Family, Work, Acedamics, Health
	39	Acedamics
	48	Family
	49	Acedamics
20-25	0	Family, Relationship, Health
	1	Acedamics
	2	Acedamics
	3	Work, Acedamics, Relationship, Financial

Are you facing a lack of concentration. \

Age

14-16	586	Completely agree
16-18	15	Somewhat agree
	26	Somewhat agree
	89	Completely agree
	124	Somewhat agree
	126	Neutral
18-20	17	Completely agree
	18	Neutral
	39	Completely agree
	48	Completely agree
	49	Somewhat agree
20-25	0	Completely agree
	1	Neutral
	2	Somewhat agree
	3	Somewhat agree
	4	Completely agree

Are you facing problems with making decisions ? \

Age

14-16	586	Neutral
16-18	15	Completely agree
	26	Neutral
	89	Somewhat agree
	124	Completely agree
	126	Neutral
18-20	17	Somewhat agree
	18	Somewhat agree
	39	Completely agree
	48	Completely disagree
	49	Neutral
20-25	0	Completely agree
	1	Completely disagree
	2	Somewhat agree
	3	Completely agree
	4	Completely agree

You feel, your life is sad, as there is no joy in your life anymore \

Age

14-16	586	Completely disagree
16-18	15	Completely disagree

	26	Neutral
	89	Neutral
	124	Somewhat agree
	126	Somewhat agree
18-20	17	Completely disagree
	18	Completely agree
	39	Completely agree
	48	Neutral
	49	Neutral
20-25	0	Completely agree
	1	Completely disagree
	2	Completely disagree
	3	Completely disagree
	4	Neutral
<p>You have been very irritated and angry recently and having mood swings \</p> <p>Age</p>		
14-16	586	Completely disagree
16-18	15	Somewhat agree
	26	Completely agree
	89	Completely disagree
	124	Somewhat agree
	126	Somewhat agree
18-20	17	Neutral
	18	Completely agree
	39	Completely agree
	48	Completely agree

49	Completely agree
20-25 0	Completely agree
1	Neutral
2	Neutral
3	Neutral
4	Neutral

Little interest or pleasure in doing things, you enjoy or
 Feel to have less interaction with Social network. \

14-16 586	Yes
16-18 15	No
26	Yes
89	Yes
124	Yes
126	No
18-20 17	No
18	No
39	Yes
48	Yes
49	Yes
20-25 0	Yes
1	Yes
2	Yes
3	Yes
4	Yes

Do you observed changes in food habits? \

Age		
14-16	586	Yes
16-18	15	No
	26	Yes
	89	No
	124	Yes
	126	No
18-20	17	No
	18	Yes
	39	No
	48	Yes
	49	No
20-25	0	No
	1	Yes
	2	Yes
	3	No
	4	No

How often do you experience trouble sleeping \

Age		
14-16	586	Frequently
16-18	15	Rarely
	26	Never
	89	Never
	124	Rarely
	126	Rarely
18-20	17	Rarely
	18	Frequently
	39	Never
	48	Frequently
	49	Rarely
20-25	0	Frequently
	1	Rarely
	2	Never
	3	Never
	4	Rarely

Do you often experience physical symptoms like headaches or muscle tension when stressed? \

Age		
14-16	586	Rarely
16-18	15	Never
	26	Frequently
	89	Never
	124	Occasionally

	126	Never
18-20	17	Occasionally
	18	Occasionally
	39	Never
	48	Occasionally
	49	Never
20-25	0	Frequently
	1	Occasionally
	2	Never
	3	Rarely
	4	Occasionally

View of yourself? \

Age		
14-16	586	You see yourself as equally worthwhile as others
16-18	15	You Feel more self blaming ,for every mistakes...
	26	You see yourself as equally worthwhile as others
	89	You see yourself as equally worthwhile as others
	124	You Feel more self blaming ,for every mistakes...
	126	You see yourself as equally worthwhile as others
18-20	17	You see yourself as equally worthwhile as others
	18	You Feel more self blaming ,for every mistakes...
	39	You see yourself as equally worthwhile as others
	48	You see yourself as equally worthwhile as others
	49	You see yourself as equally worthwhile as others
20-25	0	You see yourself as equally worthwhile as others
	1	You see yourself as equally worthwhile as others
	2	You see yourself as equally worthwhile as others
	3	You see yourself as equally worthwhile as others
	4	You see yourself as equally worthwhile as others

Thoughts that you would be better off dead, or of hurting yourself in some way? \

Age		
14-16	586	Completely disagree
16-18	15	Completely disagree

	26	Completely disagree
	89	Completely disagree
	124	Completely disagree
	126	Somewhat agree
18-20	17	Completely disagree
	18	Completely agree
	39	Somewhat agree
	48	Somewhat agree
	49	Completely disagree
20-25	0	Completely agree
	1	Completely disagree
	2	Completely disagree
	3	Somewhat agree
	4	Somewhat agree
How would you rate your overall stress level on a scale from 1 (low) to 5 (high) [Stress Level] \		
Age		
14-16	586	5
16-18	15	3
	26	4
	89	2
	124	3
	126	3
18-20	17	1
	18	4
	39	4
	48	5

49	2
20-25 0	5
1	1
2	3
3	2
4	3

Overall, do you believe that stress significantly affects your daily life and well-being? \

Age		
14-16	586	Yes, significantly
16-18	15	Yes, significantly
	26	Yes, significantly
	89	Yes, significantly
	124	Yes, significantly
	126	Yes, significantly
18-20	17	No, not at all
	18	Yes, significantly
	39	Yes, significantly
	48	No, not at all
	49	Yes, significantly
20-25	0	Yes, significantly
	1	Yes, to some extent
	2	Yes, significantly
	3	No, not at all
	4	Yes, significantly

Age

Age		
14-16	586	14-16
16-18	15	16-18
	26	16-18
	89	16-18
	124	16-18
	126	16-18
18-20	17	18-20
	18	18-20
	39	18-20
	48	18-20
	49	18-20
20-25	0	20-25
	1	20-25
	2	20-25
	3	20-25
	4	20-25

```
age_group='18-20'
age_group_df = group_by_age.get_group(age_group)
```

```
age_group_df['Which of the following sources of stress are most
significant in your life? (Select all that apply) '].value_counts()
```

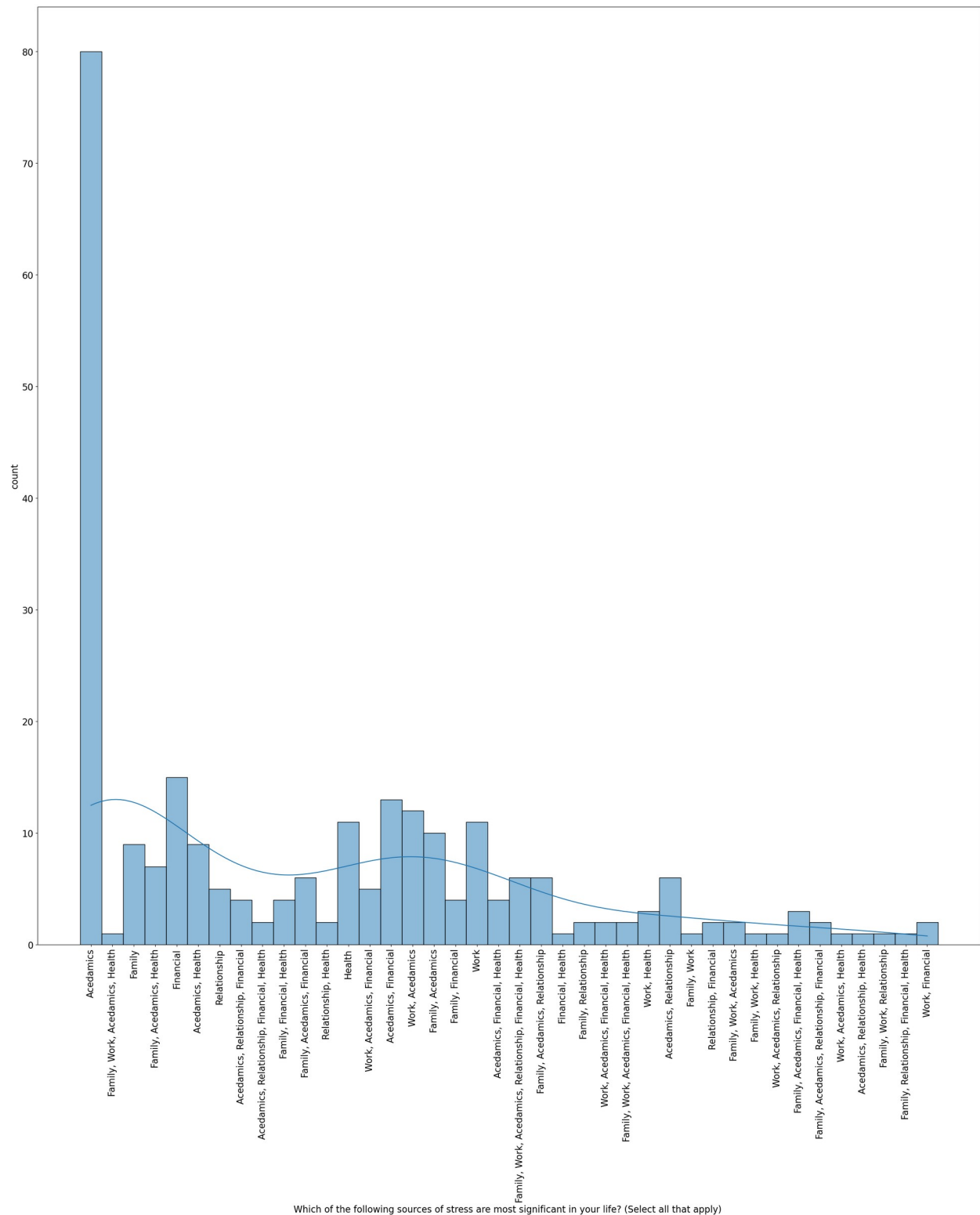
Acedamics	80
Financial	15
Acedamics, Financial	13
Work, Acedamics	12
Health	11
Work	11
Family, Acedamics	10
Family	9
Acedamics, Health	9
Family, Acedamics, Health	7
Acedamics, Relationship	6
Family, Acedamics, Relationship	6
Family, Work, Acedamics, Relationship, Financial, Health	6
Family, Acedamics, Financial	6
Work, Acedamics, Financial	5
Relationship	5
Acedamics, Relationship, Financial	4
Family, Financial, Health	4
Family, Financial	4
Acedamics, Financial, Health	4
Family, Acedamics, Financial, Health	3
Work, Health	3
Work, Financial	2
Work, Acedamics, Financial, Health	2
Family, Work, Acedamics, Financial, Health	2

Relationship, Health	2
Relationship, Financial	2
Family, Work, Acedamics	2
Family, Relationship	2
Acedamics, Relationship, Financial, Health	2
Family, Acedamics, Relationship, Financial	2
Work, Acedamics, Health	1
Family, Relationship, Financial, Health	1
Family, Work, Relationship	1
Acedamics, Relationship, Health	1
Financial, Health	1
Work, Acedamics, Relationship	1
Family, Work	1
Family, Work, Acedamics, Health	1
Family, Work, Health	1

Name: Which of the following sources of stress are most significant in your life? (Select all that apply) , dtype: int64

```
plt.figure(figsize=(30,30))
stress_columns=age_group_df['Which of the following sources of stress
are most significant in your life? (Select all that apply) ' ]

sns.histplot(stress_columns,kde=True)
plt.xticks(rotation=90)
plt.tick_params(axis='x', labelsz=16)
plt.tick_params(axis='y', labelsz=16)
plt.xlabel('Which of the following sources of stress are most
significant in your life? (Select all that apply) ', fontsize=16)
plt.ylabel('count',fontsz=16)
plt.show()
```



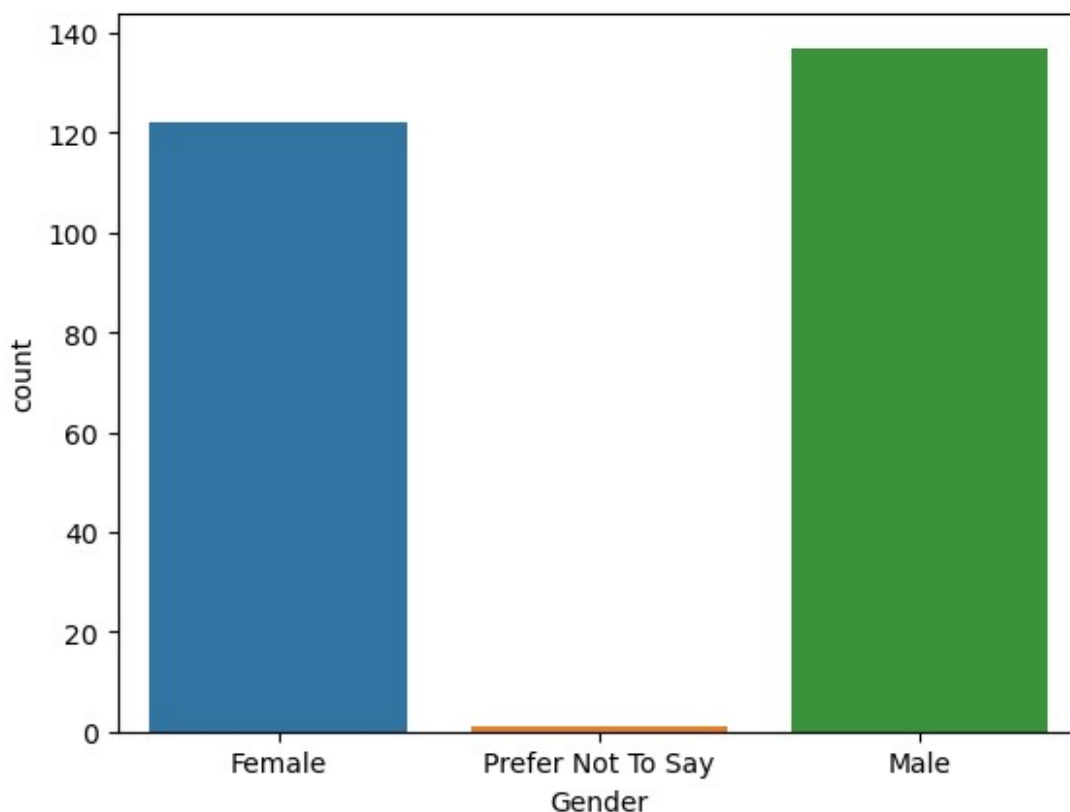
- Here, we can observe that in academics, the age group 18-20 is experiencing more stress, especially among students.

```
age_group_df.Gender.value_counts()
```

```
Male          137
Female        122
Prefer Not To Say    1
Name: Gender, dtype: int64
```

```
sns.countplot(age_group_df.Gender)
plt.show()
```

```
C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\
_decorators.py:36: FutureWarning: Pass the following variable as a
keyword arg: x. From version 0.12, the only valid positional argument
will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
  warnings.warn(
```



- From above analysis we can observe that in age group 16-18 Females are experiencing more stress

ALL Ages Groups acording (Female vs Male Vs Preder Not To Say)

```
group_by_ages = df2.groupby('Age', as_index=False)
age_group = group_by_ages['Age'].agg(lambda x: x.unique().tolist())
age_group = age_group[age_group['Age'].apply(lambda x: bool(x))]
print(age_group)
```

```

    Age
2  [14-16]
3  [16-18]
4  [18-20]
5  [20-25]

group_by_ages = df2.groupby('Age', as_index=False)
age_group = group_by_ages['Age'].agg(lambda x: x.unique().tolist())

# Filter out empty lists
age_group = age_group[age_group['Age'].apply(lambda x: bool(x))]

# Plotting
plt.subplots(2,2,figsize=(18,18))
for i, j in zip(range(1, len(age_group) + 1), age_group['Age']):
    plt.subplot(2, 2, i)
    age_group_df = df2[df2['Age'].isin(j)]
    sns.countplot(age_group_df['Gender'])
    plt.title(f'Age Group{j}')
plt.show()

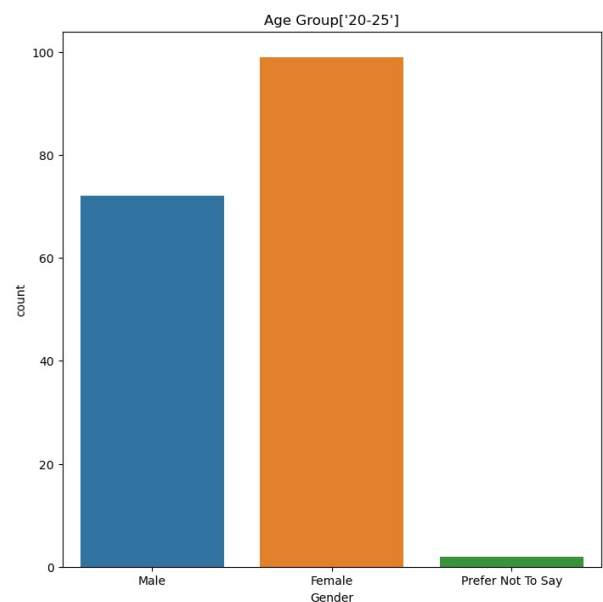
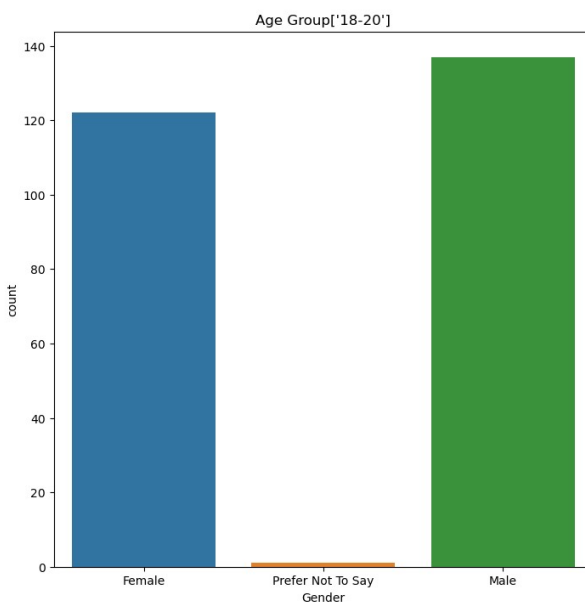
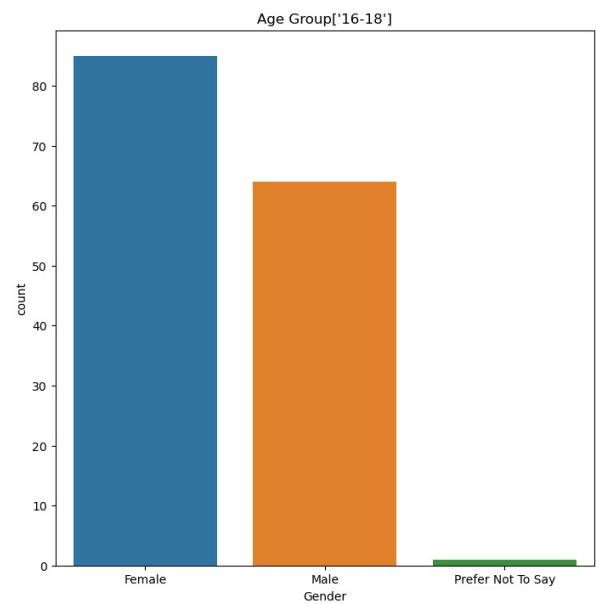
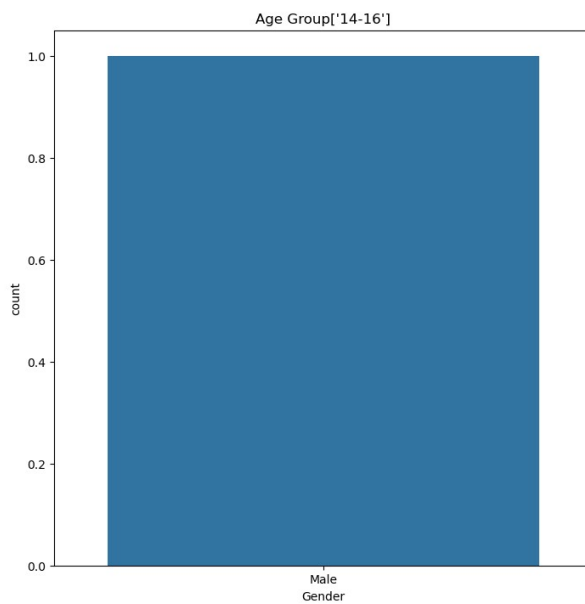
```

```

C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\
_decorators.py:36: FutureWarning: Pass the following variable as a
keyword arg: x. From version 0.12, the only valid positional argument
will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
  warnings.warn(
C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\
_decorators.py:36: FutureWarning: Pass the following variable as a
keyword arg: x. From version 0.12, the only valid positional argument
will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
  warnings.warn(
C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\
_decorators.py:36: FutureWarning: Pass the following variable as a
keyword arg: x. From version 0.12, the only valid positional argument
will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
  warnings.warn(
C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\
_decorators.py:36: FutureWarning: Pass the following variable as a
keyword arg: x. From version 0.12, the only valid positional argument
will be `data`, and passing other arguments without an explicit

```

keyword will result in an error or misinterpretation.
warnings.warn()



- In the age group 14-16, males are experiencing more stress.
- In the age group 16-18,18-20,20-25, females are experiencing more stress.

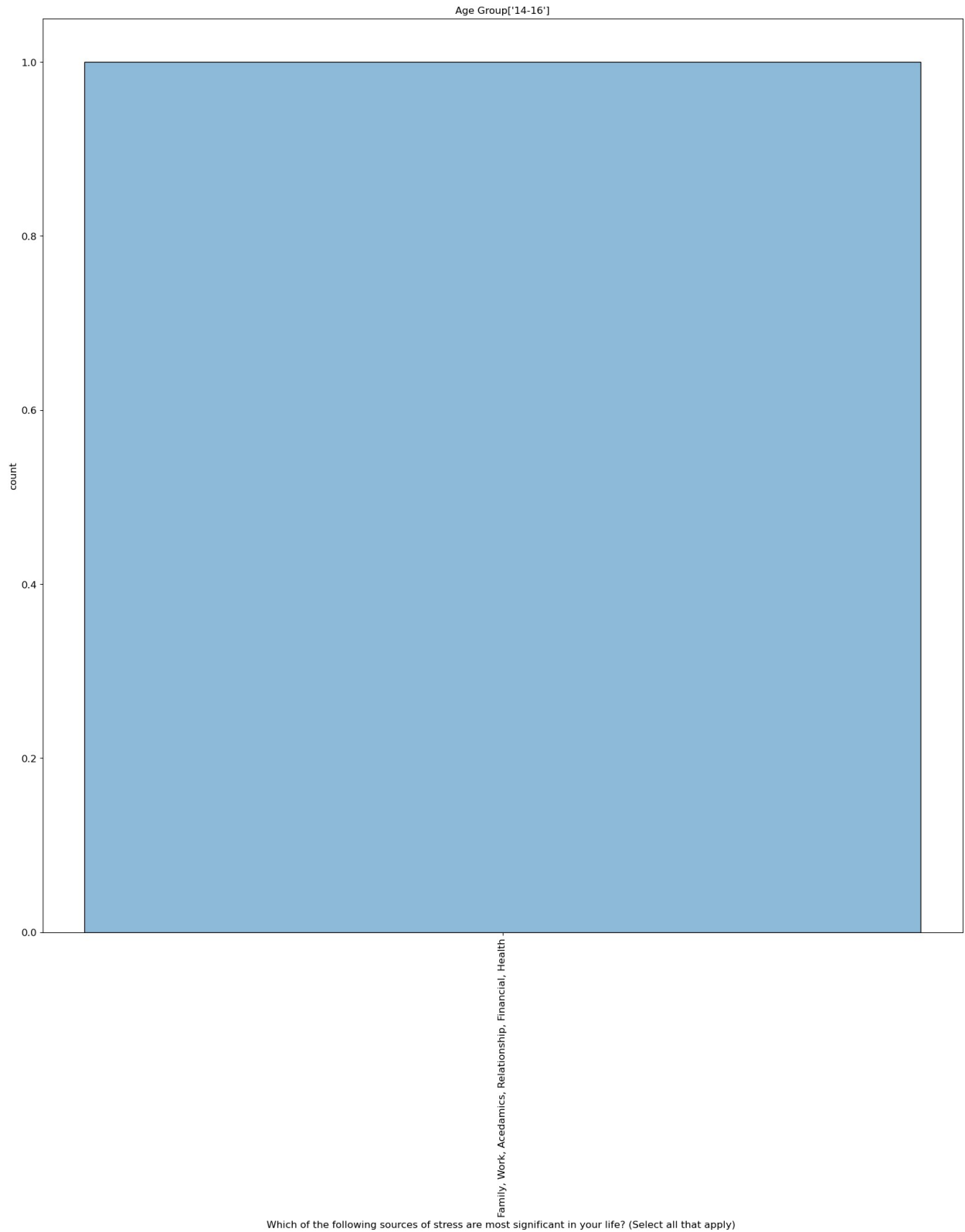
```
group_by_ages = df2.groupby('Age', as_index=False)
age_group = group_by_ages['Age'].agg(lambda x: x.unique().tolist())

# Filter out empty lists
age_group = age_group[age_group['Age'].apply(lambda x: bool(x))]
```

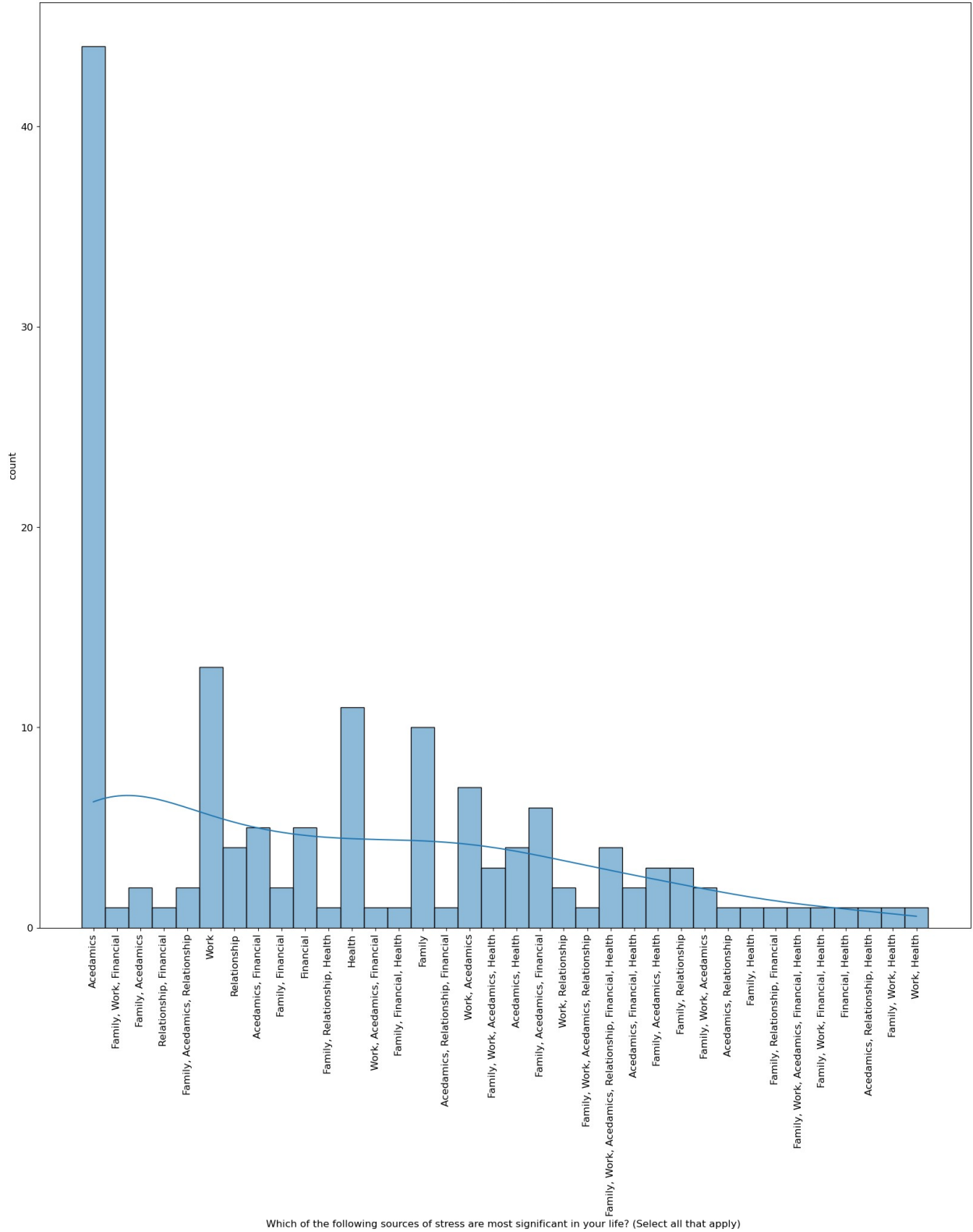
```

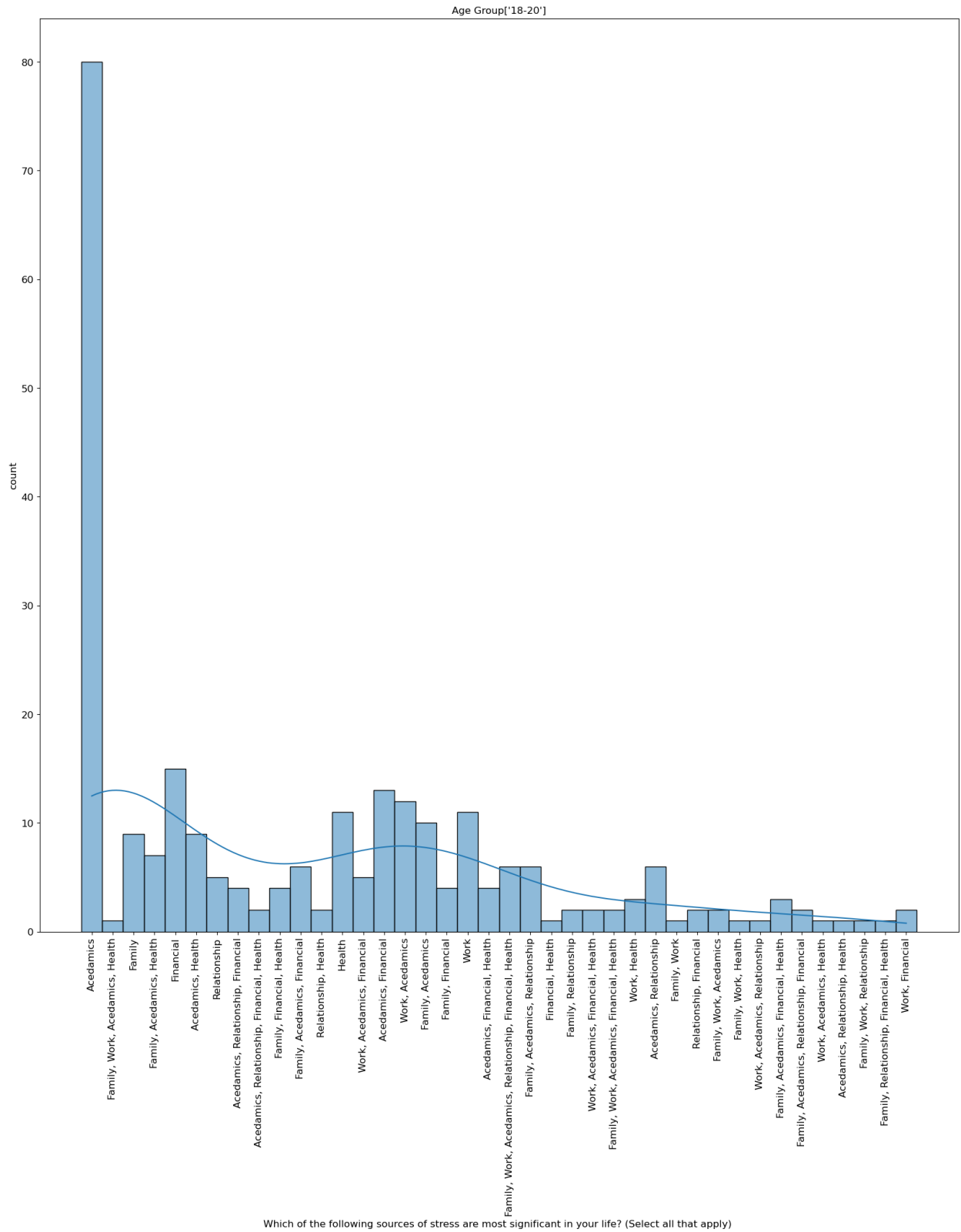
# Plotting
for i, j in zip(range(1, len(age_group) + 1), age_group['Age']):
    age_group_df = df2[df2['Age'].isin(j)]
    plt.figure(figsize=(20,20))
    stress_columns=age_group_df['Which of the following sources of
stress are most significant in your life? (Select all that apply) ' ]
    sns.histplot(stress_columns,kde=True)
    plt.xticks(rotation=90)
    plt.tick_params(axis='x', labelsz=12)
    plt.tick_params(axis='y', labelsz=12)
    plt.xlabel('Which of the following sources of stress are most
significant in your life? (Select all that apply) ', fontsize=12)
    plt.ylabel('count',fontsz=12)
    plt.title(f'Age Group{j}')
plt.show()

```

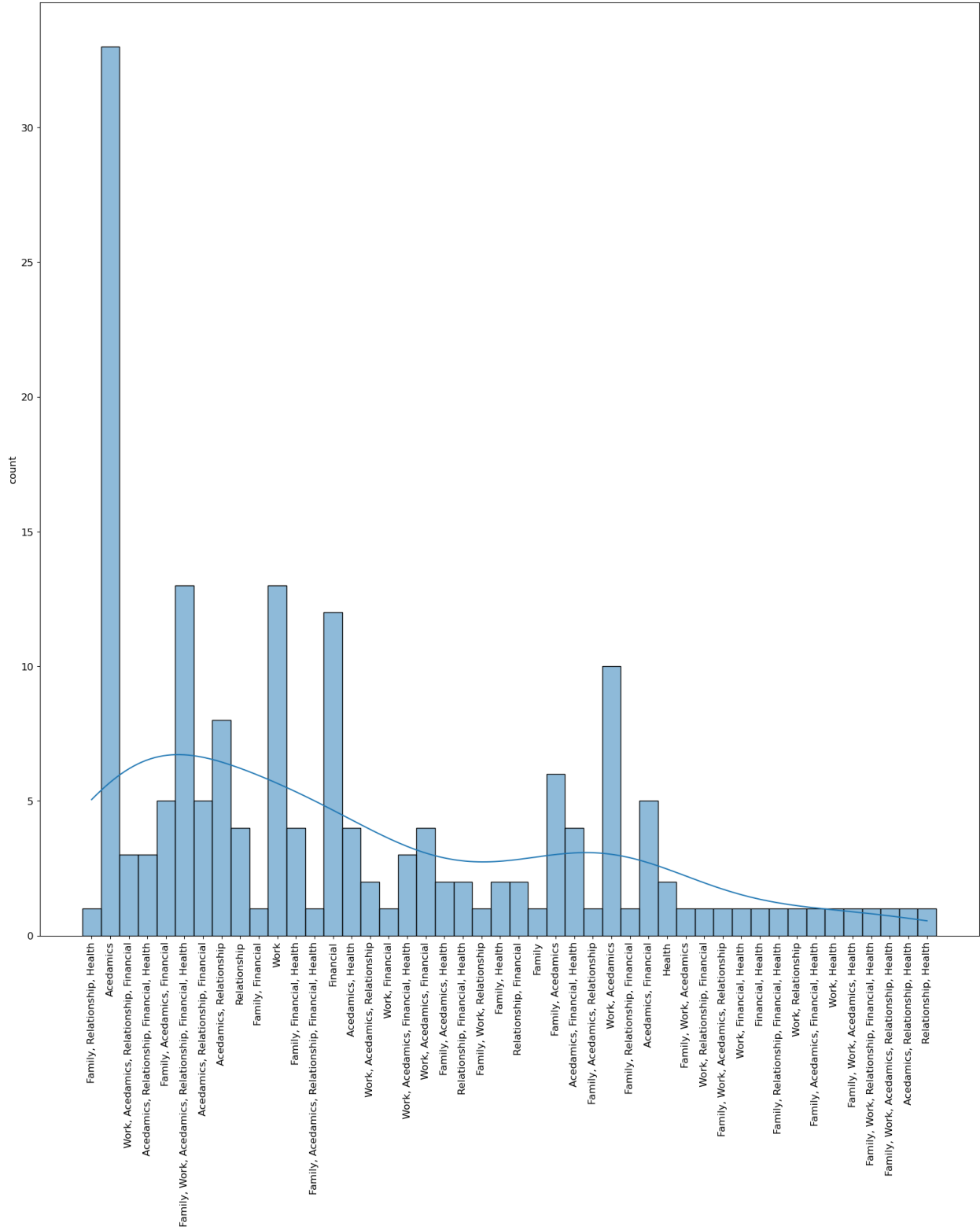


Age Group['16-18']





Age Group['20-25']



df.columns

```

Index([' Name', 'Email', 'Gender', 'Date of Birth', 'Study Year',
      'Which of the following sources of stress are most significant
in your life? (Select all that apply) ',
      'Are you facing a lack of concentration. ',
      'Are you facing problems with making decisions ? ',
      'You feel, your life is sad, as there is no joy in your life
anymore ',
      'You have been very irritated and angry recently and having
mood swings ',
      'Little interest or pleasure in doing things, you enjoy or Feel
to have less interaction with Social network. ',
      'Do you observed changes in food habits?',
      'How often do you experience trouble sleeping ',
      ' Do you often experience physical symptoms like headaches or
muscle tension when stressed? ',
      'View of yourself?',
      'Thoughts that you would be better off dead, or of hurting
yourself in some way? ',
      'How would you rate your overall stress level on a scale from 1
(low) to 5 (high) [ Stress Level]',
      'Overall, do you believe that stress significantly affects your
daily life and well-being? ',
      'Age'],
      dtype='object')

df['How would you rate your overall stress level on a scale from 1
(low) to 5 (high) [ Stress Level]'].value_counts()

3      169
2      165
1      136
4       80
5       37
Name: How would you rate your overall stress level on a scale from 1
(low) to 5 (high) [ Stress Level], dtype: int64

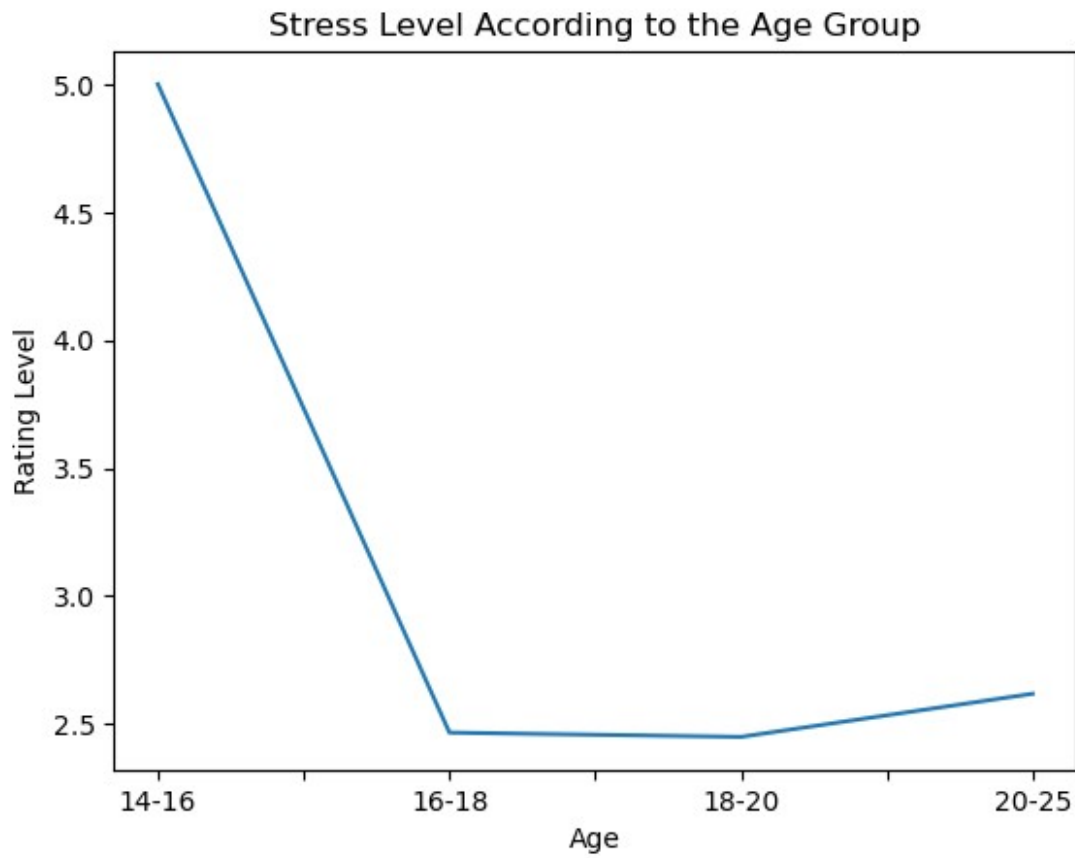
```

Stress Level According to the Age Group

```

stress_level=pd.pivot_table(df2,values='How would you rate your
overall stress level on a scale from 1 (low) to 5 (high) [ Stress
Level]',index='Age')
stress_level.plot()
plt.legend().set_visible(False)
plt.xlabel('Age')
plt.ylabel("Rating Level")
plt.title("Stress Level According to the Age Group")
plt.show()

```



```
group_by_stress_level=df2.groupby(['Age', 'How would you rate your
overall stress level on a scale from 1 (low) to 5 (high) [ Stress
Level]'],as_index=False')
```

```
group_sizes_df = group_by_stress_level.size().reset_index(name='Group
Size')
```

```
group_sizes_df
```

	Age \
0	10-12
1	10-12
2	10-12
3	10-12
4	10-12
5	12-14
6	12-14
7	12-14
8	12-14
9	12-14
10	14-16

11 14-16
12 14-16
13 14-16
14 14-16
15 16-18
16 16-18
17 16-18
18 16-18
19 16-18
20 18-20
21 18-20
22 18-20
23 18-20
24 18-20
25 20-25
26 20-25
27 20-25
28 20-25
29 20-25

How would you rate your overall stress level on a scale from 1
(low) to 5 (high) [Stress Level] \

0	1
1	2
2	3
3	4
4	5
5	1
6	2
7	3
8	4
9	5
10	1
11	2
12	3
13	4
14	5

15	1
16	2
17	3
18	4
19	5
20	1
21	2
22	3
23	4
24	5
25	1
26	2
27	3
28	4
29	5

	Group Size
0	0
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	1
15	40
16	40
17	38

18	24
19	8
20	72
21	70
22	63
23	39
24	16
25	24
26	55
27	68
28	15
29	11

```
group_sizes_df=group_sizes_df[~(group_sizes_df['Group Size']==0)]
```

```
# Find the maximum stress level suffering age group
```

```
max_age_group_stress_level = group_sizes_df[group_sizes_df['Group Size'] == group_sizes_df['Group Size'].max()]
```

```
# Display the maximum stress level suffering age group
```

```
max_age_group_stress_level
```

	Age \
20	18-20

	How would you rate your overall stress level on a scale from 1 (low) to 5 (high) [Stress Level] \
20	1

	Group Size
20	72

```
# Find the minimum stress level suffering age group
```

```
min_age_group_stress_level = group_sizes_df[group_sizes_df['Group Size'] == group_sizes_df['Group Size'].min()]
```

```
# Display the minimum stress level suffering age group
```

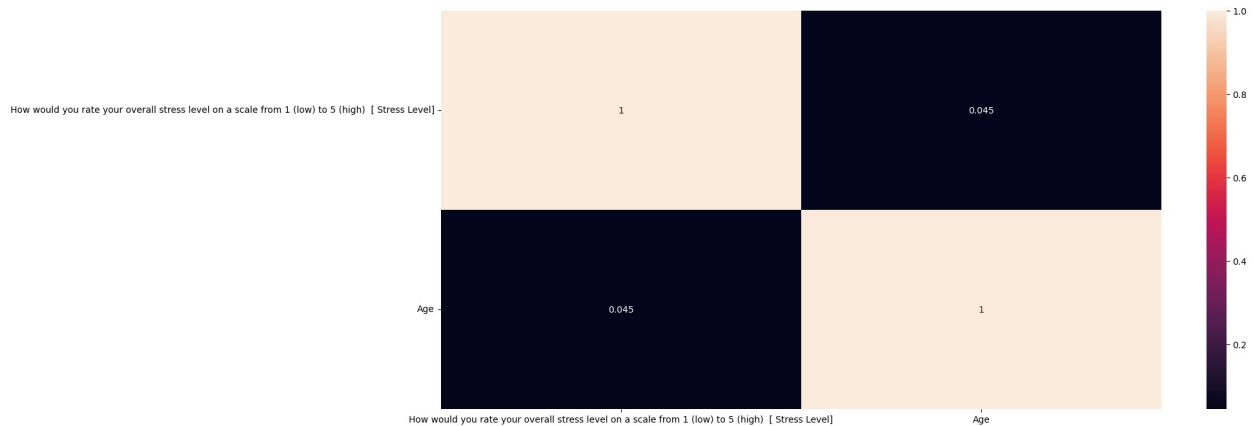
```
min_age_group_stress_level
```

	Age \
14	14-16

	How would you rate your overall stress level on a scale from 1 (low) to 5 (high) [Stress Level] \
14	5

	Group Size
14	1

```
plt.figure(figsize=(18,8))
sns.heatmap(df.corr(),annot=True)
plt.show()
```



```
df2.head()
```

	Name	Email	Gender	Date of Birth \
0	Pavan Kalyan	pavankalyanc162@gmail.com	Male	2003-12-17
1	Shaik Haleema saadiya	saadiyashaik13@gmail.com	Female	2003-07-13
2	Swetha	r190311@rguktrkv.ac.in	Female	2004-07-29
3	Chandu	r190266@rguktrkv.ac.in	Male	2004-08-19
4	G.Praharsha	r190411@rguktrkv.ac.in	Female	2004-06-10

	Study Year \
0	Enng-3
1	Enng-3
2	Enng-3
3	Enng-3
4	Enng-3

Which of the following sources of stress are most significant in your life? (Select all that apply) \

0	Family, Relationship, Health
1	Acedamics
2	Acedamics
3	Work, Acedamics, Relationship, Financial

4 Acedamics, Relationship, Financial, Health

Are you facing a lack of concentration. \

- 0 Completely agree
- 1 Neutral
- 2 Somewhat agree
- 3 Somewhat agree
- 4 Completely agree

Are you facing problems with making decisions ? \

- 0 Completely agree
- 1 Completely disagree
- 2 Somewhat agree
- 3 Completely agree
- 4 Completely agree

You feel, your life is sad, as there is no joy in your life anymore

- \
- 0 Completely agree
 - 1 Completely disagree
 - 2 Completely disagree
 - 3 Completely disagree
 - 4 Neutral

You have been very irritated and angry recently and having mood swings \

- 0 Completely agree
- 1 Neutral
- 2 Neutral
- 3 Neutral
- 4 Neutral

Little interest or pleasure in doing things, you enjoy or Feel to have less interaction with Social network. \

- 0 Yes
- 1 Yes
- 2 Yes

3 Yes

4 Yes

Do you observed changes in food habits? \

0 No

1 Yes

2 Yes

3 No

4 No

How often do you experience trouble sleeping \

0 Frequently

1 Rarely

2 Never

3 Never

4 Rarely

Do you often experience physical symptoms like headaches or muscle tension when stressed? \

0 Frequently

1 Occassionally

2 Never

3 Rarely

4 Occassionally

View of yourself? \

0 You see yourself as equally worthwhile as others

1 You see yourself as equally worthwhile as others

2 You see yourself as equally worthwhile as others

3 You see yourself as equally worthwhile as others

4 You see yourself as equally worthwhile as others

Thoughts that you would be better off dead, or of hurting yourself in some way? \

0 Completely agree

1 Completely disagree

2 Completely disagree

3 Somewhat agree

4 Somewhat agree

How would you rate your overall stress level on a scale from 1 (low) to 5 (high) [Stress Level] \

0	5
1	1
2	3
3	2
4	3

Overall, do you believe that stress significantly affects your daily life and well-being? \

0	Yes, significantly
1	Yes, to some extent
2	Yes, significantly
3	No, not at all
4	Yes, significantly

	Age
0	20-25
1	20-25
2	20-25
3	20-25
4	20-25

Changes observed in food habits vs Age group

```
Food_Habits_df=df2[df2["Do you observed changes in food habits?"]=="Yes"]
```

Food_Habits_df

	Name	Email	Gender	\
1	Shaik Haleema saadiya	saadiyashaik13@gmail.com	Female	
2	Swetha	r190311@rguktrkv.ac.in	Female	
5	Jagathi Sri	jagathisri9059@gmail.com	Female	
7	Yacham poojitha	Yachampoojitha@gmail.com	Female	
8	prudhvi	saigeetha4u@gmail.com	Male	
...	
608	P Gowtham reddy	gowtham93920@gmail.com	Male	
609	CHINTHALA KARTHEEK	kartheekchinthala1@gmail.com	Male	
610	Joyal	swarnalathamallori@gmail.com	Male	

612	K Uday Kiran	o230774@rguktrkv.ac.in	Male
613	Empuluri Lakshmi	r220237@rguktrkv.ac.in	Female

	Date of Birth	Study Year	\
1	2003-07-13	Enng-3	
2	2004-07-29	Enng-3	
5	2003-09-17	Enng-3	
7	2004-05-03	Enng-3	
8	1999-01-09	Degree-3	
..	
608	2008-03-06	Inter First Year/P1	
609	2005-01-24	Inter Second Year/P2	
610	2008-06-03	Inter First Year/P1	
612	2007-03-03	Inter First Year/P1	
613	2007-01-03	Inter Second Year/P2	

Which of the following sources of stress are most significant in your life? (Select all that apply) \

1	Acedamics
2	Acedamics
5	Acedamics
7	Family, Work, Acedamics, Relationship, Financi...
8	Relationship, Financial
..	...
608	Acedamics
609	Financial
610	Acedamics
612	Work
613	Acedamics

Are you facing a lack of concentration. \

1	Neutral
2	Somewhat agree
5	Somewhat agree
7	Completely disagree
8	Completely disagree
..	...
608	Completely agree
609	Somewhat agree
610	Neutral

612 Neutral
613 Somewhat agree

Are you facing problems with making decisions ? \

1	Completely disagree
2	Somewhat agree
5	Neutral
7	Neutral
8	Completely disagree
..	...
608	Completely disagree
609	Somewhat agree
610	Somewhat agree
612	Neutral
613	Completely agree

You feel, your life is sad, as there is no joy in your life anymore \

1	Completely disagree
2	Completely disagree
5	Somewhat agree
7	Neutral
8	Completely disagree
..	...
608	Completely agree
609	Neutral
610	Neutral
612	Completely agree
613	Neutral

You have been very irritated and angry recently and having mood swings \

1	Neutral
2	Neutral
5	Neutral
7	Neutral

8	Neutral
---	---------

..	...
----	-----

608	Completely agree
-----	------------------

609	Completely agree
-----	------------------

610	Somewhat agree
-----	----------------

612	Neutral
-----	---------

613	Somewhat agree
-----	----------------

Little interest or pleasure in doing things, you enjoy or Feel to have less interaction with Social network. \

1	Yes
---	-----

2	Yes
---	-----

5	No
---	----

7	Yes
---	-----

8	No
---	----

..	...
----	-----

608	Yes
-----	-----

609	No
-----	----

610	Yes
-----	-----

612	Yes
-----	-----

613	Yes
-----	-----

Do you observed changes in food habits? \

1	Yes
---	-----

2	Yes
---	-----

5	Yes
---	-----

7	Yes
---	-----

8	Yes
---	-----

..	...
----	-----

608	Yes
-----	-----

609	Yes
-----	-----

610	Yes
-----	-----

612	Yes
-----	-----

613 Yes

How often do you experience trouble sleeping \

1 Rarely

2 Never

5 Rarely

7 Frequently

8 Frequently

.. ...

608 Frequently

609 Rarely

610 Occassionally

612 Rarely

613 Rarely

Do you often experience physical symptoms like headaches or muscle tension when stressed? \

1 Occassionally

2 Never

5 Occassionally

7 Frequently

8 Never

.. ...

608 Never

609 Rarely

610 Frequently

612 Rarely

613 Never

View of yourself? \

1 You see yourself as equally worthwhile as others

2 You see yourself as equally worthwhile as others

5 You see yourself as equally worthwhile as others

7 You Feel more self blaming ,for every mistakes...

8 You see yourself as equally worthwhile as others

.. ...

608 You Feel like You Cause Problems to Others

609 You see yourself as equally worthwhile as others

610 You Feel more self blaming ,for every mistakes...

612 You Feel more self blaming ,for every mistakes...

613 You Feel more self blaming ,for every mistakes...

Thoughts that you would be better off dead, or of hurting yourself
in some way? \

1 Completely disagree

2 Completely disagree

5 Completely disagree

7 Completely agree

8 Completely disagree

.. ...

608 Somewhat agree

609 Completely disagree

610 Somewhat agree

612 Completely disagree

613 Somewhat agree

How would you rate your overall stress level on a scale from 1
(low) to 5 (high) [Stress Level] \

1 1

2 3

5 3

7 5

8 5

.. ...

608 4

609 2

610 3

612 1

613 1


```
Overall, do you believe that stress significantly affects your
daily life and well-being? \
```

```
1          Yes, to some extent
2          Yes, significantly
5          Yes, significantly
7          Yes, significantly
8          Yes, significantly
..          ...
608        Yes, significantly
609        Yes, significantly
610        Yes, significantly
612        No, not at all
613        Yes, significantly
```

```
Age
1    20-25
2    20-25
5    20-25
7    20-25
8     NaN
..     ...
608   16-18
609   18-20
610   16-18
612   16-18
613   16-18
```

```
[291 rows x 19 columns]
```

```
Food_Habits_df.Age.value_counts()
```

```
18-20    130
20-25     83
16-18     75
14-16      1
10-12      0
12-14      0
```

```
Name: Age, dtype: int64
```

- From above analysis we can observe that in the age group 16-18 observed changes in their food habits,while experiencing stress.

Sleeping effect according to Age group

```
Sleeping_Effect_df=df2[~(df2["How often do you experience trouble sleeping "]=='Never') ]
```

```
Sleeping_Effect_df
```

	Name	Email
\		
0	Pavan Kalyan	pavankalyanc162@gmail.com
1	Shaik Haleema saadiya	saadiyashaik13@gmail.com
4	G.Praharsha	r190411@rguktrkv.ac.in
5	Jagathi Sri	jagathisri9059@gmail.com
6	S.Leela	sriramulaleela2004@gmail.com
..
610	Joyal	swarnalathamallori@gmail.com
611	Patnam.Sri venkata Sambasiva rao	sambasivaraopatnam4@gmail.com
612	K Uday Kiran	o230774@rguktrkv.ac.in
613	Empuluri Lakshmi	r220237@rguktrkv.ac.in
614	Lakkunta Rohith	lakkuntarohithyadav@gmail.com

	Gender	Date of Birth	Study Year	\
0	Male	2003-12-17	Enng-3	
1	Female	2003-07-13	Enng-3	
4	Female	2004-06-10	Enng-3	
5	Female	2003-09-17	Enng-3	
6	Prefer Not To Say	2004-06-13	Enng-3	
..	
610	Male	2008-06-03	Inter First Year/P1	
611	Male	2006-01-24	Inter Second Year/P2	
612	Male	2007-03-03	Inter First Year/P1	
613	Female	2007-01-03	Inter Second Year/P2	
614	Male	2007-11-08	Inter First Year/P1	

Which of the following sources of stress are most significant in your life? (Select all that apply) \

0 Family, Relationship, Health

1	Acedamics
4	Acedamics, Relationship, Financial, Health
5	Acedamics
6	Family, Acedamics, Financial
..	...
610	Acedamics
611	Work, Acedamics, Financial
612	Work
613	Acedamics
614	Family, Work, Acedamics

	Are you facing a lack of concentration.	\
0	Completely agree	
1	Neutral	
4	Completely agree	
5	Somewhat agree	
6	Completely agree	
..	...	
610	Neutral	
611	Somewhat agree	
612	Neutral	
613	Somewhat agree	
614	Completely agree	

	Are you facing problems with making decisions ?	\
0	Completely agree	
1	Completely disagree	
4	Completely agree	
5	Neutral	
6	Somewhat agree	
..	...	
610	Somewhat agree	
611	Completely agree	
612	Neutral	
613	Completely agree	
614	Completely agree	

	You feel, your life is sad, as there is no joy in your life anymore	\
0	Completely agree	

1	Completely disagree
---	---------------------

4	Neutral
---	---------

5	Somewhat agree
---	----------------

6	Neutral
---	---------

..	...
----	-----

610	Neutral
-----	---------

611	Neutral
-----	---------

612	Completely agree
-----	------------------

613	Neutral
-----	---------

614	Somewhat agree
-----	----------------

You have been very irritated and angry recently and having mood swings \

0	Completely agree
---	------------------

1	Neutral
---	---------

4	Neutral
---	---------

5	Neutral
---	---------

6	Somewhat agree
---	----------------

..	...
----	-----

610	Somewhat agree
-----	----------------

611	Somewhat agree
-----	----------------

612	Neutral
-----	---------

613	Somewhat agree
-----	----------------

614	Completely agree
-----	------------------

Little interest or pleasure in doing things, you enjoy or Feel to have less interaction with Social network. \

0	Yes
---	-----

1	Yes
---	-----

4	Yes
5	No
6	Yes
..	...
610	Yes
611	Yes
612	Yes
613	Yes
614	Yes

Do you observed changes in food habits? \	
0	No
1	Yes
4	No
5	Yes
6	No
..	...
610	Yes
611	No
612	Yes
613	Yes
614	No

How often do you experience trouble sleeping \	
0	Frequently
1	Rarely
4	Rarely
5	Rarely
6	Rarely
..	...
610	Occasionally
611	Occasionally
612	Rarely
613	Rarely
614	Frequently

Do you often experience physical symptoms like headaches or muscle tension when stressed? \	
0	Frequently
1	Occasionally

4	Occasionally
5	Occasionally
6	Occasionally
..	...
610	Frequently
611	Frequently
612	Rarely
613	Never
614	Frequently

	View of yourself? \
0	You see yourself as equally worthwhile as others
1	You see yourself as equally worthwhile as others
4	You see yourself as equally worthwhile as others
5	You see yourself as equally worthwhile as others
6	You Feel like You Cause Problems to Others
..	...
610	You Feel more self blaming ,for every mistakes...
611	You Feel like You Cause Problems to Others
612	You Feel more self blaming ,for every mistakes...
613	You Feel more self blaming ,for every mistakes...
614	You Feel more self blaming ,for every mistakes...

Thoughts that you would be better off dead, or of hurting yourself in some way? \

0	Completely agree
1	Completely disagree
4	Somewhat agree
5	Completely disagree
6	Completely disagree
..	...
610	Somewhat agree
611	Completely disagree
612	Completely disagree

613	Somewhat agree
-----	----------------

614	Completely agree
-----	------------------

How would you rate your overall stress level on a scale from 1 (low) to 5 (high) [Stress Level] \

0	5
---	---

1	1
---	---

4	3
---	---

5	3
---	---

6	2
---	---

..	...
----	-----

610	3
-----	---

611	3
-----	---

612	1
-----	---

613	1
-----	---

614	4
-----	---

Overall, do you believe that stress significantly affects your daily life and well-being? \

0	Yes, significantly
---	--------------------

1	Yes, to some extent
---	---------------------

4	Yes, significantly
---	--------------------

5	Yes, significantly
---	--------------------

6	Yes, significantly
---	--------------------

..	...
----	-----

610	Yes, significantly
-----	--------------------

611	Yes, significantly
-----	--------------------

612	No, not at all
-----	----------------

613	Yes, significantly
-----	--------------------

614 Yes, significantly

```
Age
0    20-25
1    20-25
4    20-25
5    20-25
6    20-25
..    ...
610   16-18
611   18-20
612   16-18
613   16-18
614   16-18
```

```
[489 rows x 19 columns]
```

```
Sleeping_Effect_df.shape
```

```
(489, 19)
```

```
Sleeping_Effect_df.Age.value_counts()
```

```
18-20    216
20-25    138
16-18    131
14-16      1
10-12      0
12-14      0
Name: Age, dtype: int64
```

- From the above analysis in the age group 16-18 people suffering from sleep while their experiencing the stress

```
Sleeping_Effect_df["How often do you experience trouble sleeping"].value_counts()
```

```
Rarely    199
Frequently 161
Occasionally 129
Name: How often do you experience trouble sleeping , dtype: int64
```

- Many students are rarely suffering from the sleep, while their experiencing the stress

```
sleeping_trouble=pd.pivot_table(df2,values="How often do you experience trouble sleeping ",index='Age')
```

```
C:\Users\Arigala.Adarsh\AppData\Local\Temp\ipykernel_8512\2365003257.py:1: FutureWarning: Dropping invalid
```


columns in DataFrameGroupBy.mean is deprecated. In a future version, a TypeError will be raised. Before calling .mean, select only columns which should be valid for the function.

```
sleeping_trouble=pd.pivot_table(df2,values="How often do you experience trouble sleeping ",index='Age')
```

```
# Creating the pivot table
```

```
sns.countplot(data=df2, x='Age', hue='How often do you experience trouble sleeping ')
```

```
# Plotting
```

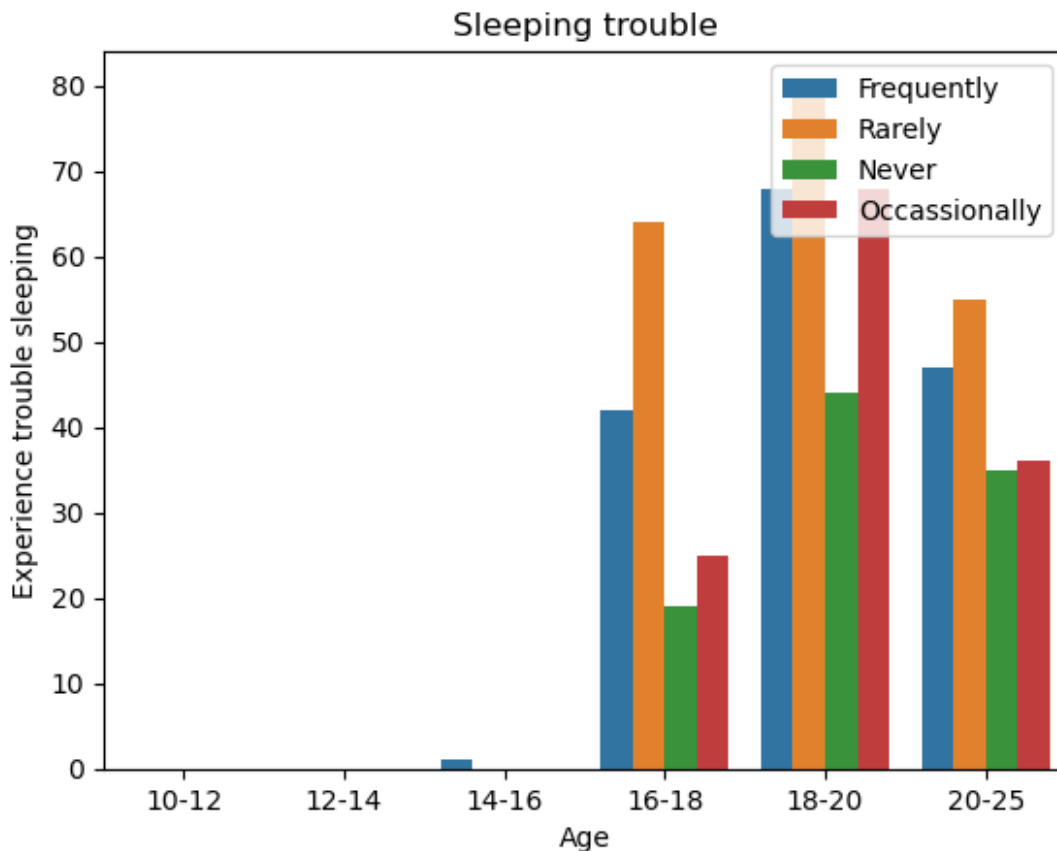
```
plt.legend()
```

```
plt.xlabel('Age')
```

```
plt.ylabel('Experience trouble sleeping')
```

```
plt.title('Sleeping trouble')
```

```
plt.show()
```



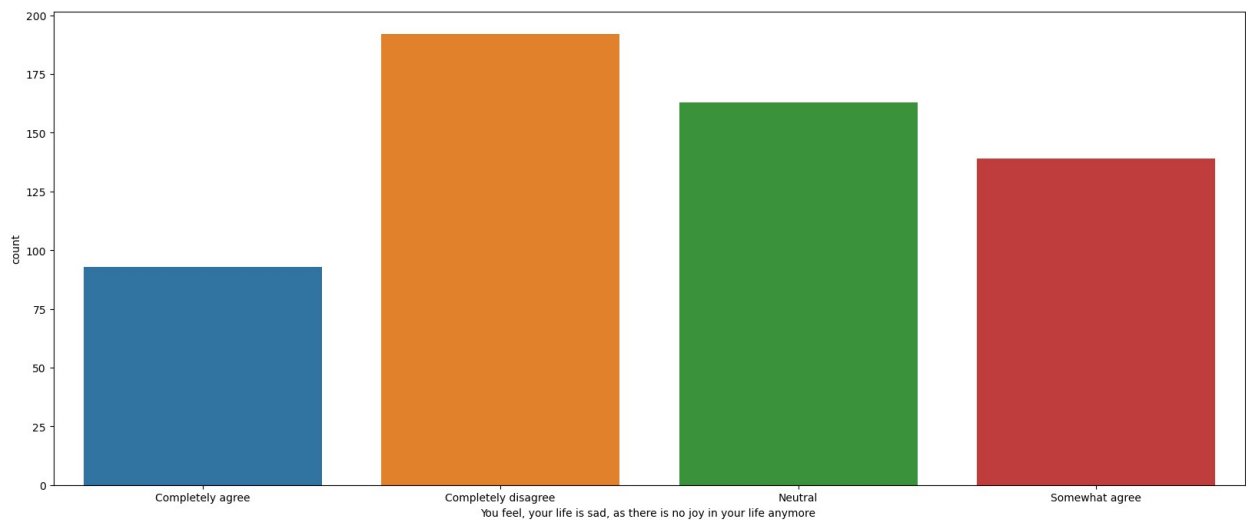
How many of deeling life is sad, as there is no joy in your life anymore

```
df['You feel, your life is sad, as there is no joy in your life anymore '].unique()
```

```
array(['Completely agree', 'Completely disagree', 'Neutral',
      'Somewhat agree'], dtype=object)

plt.figure(figsize=(20,8))
sns.countplot(df['You feel, your life is sad, as there is no joy in
your life anymore '])
plt.show()

C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\
_decorators.py:36: FutureWarning: Pass the following variable as a
keyword arg: x. From version 0.12, the only valid positional argument
will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
warnings.warn(
```



```
l=list(df['You feel, your life is sad, as there is no joy in your life
anymore '].unique())
d={}
for i in l:
    c=df[df['You feel, your life is sad, as there is no joy in your
life anymore ']==i]['You feel, your life is sad, as there is no joy in
your life anymore '].count()
    d[i]=c
print(d)
```

```
{'Completely agree': 93, 'Completely disagree': 192, 'Neutral': 163,
'Somewhat agree': 139}
```

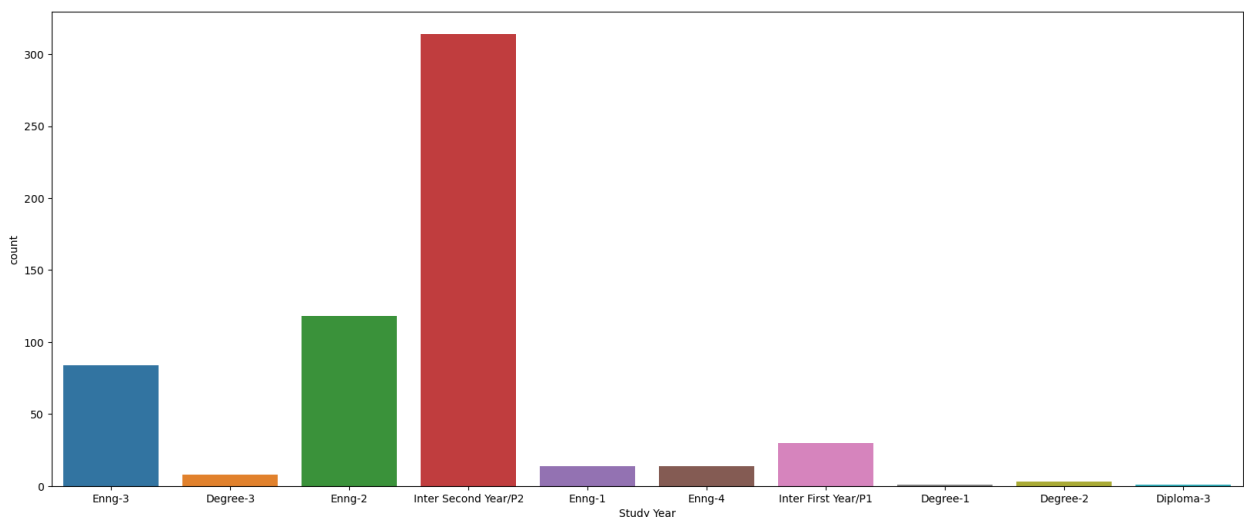
- From the above analysis we can say that many of the people not feeling like life is sad, as there is no joy in life anymore

Which Study Year People are suffering more?

```
study_year=df
```

```
plt.figure(figsize=(20,8))
sns.countplot(study_year['Study Year'])
plt.show()
```

```
C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\
_decorators.py:36: FutureWarning: Pass the following variable as a
keyword arg: x. From version 0.12, the only valid positional argument
will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
  warnings.warn(
```



```
l=list(df['Study Year'].unique())
d={}
for i in l:
    c=df[df['Study Year']==i]['Study Year'].count()
    d[i]=c
print(d)
```

```
{'Enng-3': 84, 'Degree-3': 8, 'Enng-2': 118, 'Inter Second Year/P2':
314, 'Enng-1': 14, 'Enng-4': 14, 'Inter First Year/P1': 30, 'Degree-
1': 1, 'Degree-2': 3, 'Diploma-3': 1}
```

- **From the Above analysis we can say that Inter Second Year/P2 People are suffering more stress**

```
Inter_second_year=df[df['Study Year']=='Inter Second Year/P2']
```

```
Inter_second_year_groupby=Inter_second_year.groupby('Which of the
following sources of stress are most significant in your life? (Select
all that apply) ' )
```

```
Inter_second_year_groupby.apply(lambda x: x.head(5))
```

Name \		
Which of the following sources of stress are mo...		
Acedamics	15	Harshitha
Suryakumar	39	
Neeraja	127	
Tejasree	129	
A.Sasikala	130	Emmareddy
Sruthi		
...		
...		
Work, Health	314	
Manasa Reddy	415	Revanth
manikanta	536	GUNAPARTI
BALAJI	334	SAKE GOUTHAM
Work, Relationship	514	
MATHUR		
Gnaneshwar		
Email \		
Which of the following sources of stress are mo...		
Acedamics	15	
Www.harshithasuryakumar@gmail.com	39	
neeraja.kuttuboina@gmail.com	127	
R220897 @rguktrkv.ac.in	129	
r220958@rguktrkv.ac.in	130	
r220997@rguktrkv.ac.in		
...		
...		
Work, Health	314	
mn8471.reddy@gmail.com	415	
o220582@rguktrkv.ac.in	536	

o220592@rguktrkv.ac.in

Work, Relationship

334

gouthammathur1537@gmail.com

514

gnaneshwarmada@gmail.com

Gender Date of

Birth \

Which of the following sources of stress are mo...

Acedamics

15

Female

2007-06-05

39

Female

2006-12-03

127

Female

2006-10-24

129

Female

2008-02-20

130

Female

2007-06-18

...

...

...

Work, Health

314

Female

2006-09-20

415

Male

2005-12-26

536

Male

2006-07-17

Work, Relationship

334

Male

2007-08-09

514

Male

2008-07-02

Study Year \

Which of the following sources of stress are mo...

Acedamics

15

Inter Second

Year/P2

39

Inter Second

Year/P2

127

Inter Second

Year/P2

129

Inter Second

Year/P2

130

Inter Second

Year/P2

...

...

Work, Health

314

Inter Second

Year/P2	415	Inter Second
Year/P2	536	Inter Second
Year/P2	334	Inter Second
Work, Relationship	514	Inter Second
Year/P2		
Year/P2		

Which of the following sources of stress are most significant in your life? (Select all that apply) \

Which of the following sources of stress are mo...

Acedamics	15
Acedamics	39
Acedamics	127
Acedamics	129
Acedamics	130
Acedamics	
...	
...	
Work, Health	314
Work, Health	415
Work, Health	536
Work, Health	334
Work, Relationship	514
Work, Relationship	

Are you facing a lack of concentration. \

Which of the following sources of stress are mo...

Acedamics	15
Somewhat agree	39
Completely agree	127
Somewhat agree	

Completely agree	129	
Completely agree	130	
...		
...		
Work, Health	314	
Somewhat agree	415	
Somewhat agree	536	
Somewhat agree	334	
Work, Relationship	514	
Somewhat agree		
		Are you facing
problems with making decisions ? \		
Which of the following sources of stress are mo...		
Acedamics	15	
Completely agree	39	
Completely agree	127	
Neutral	129	
Somewhat agree	130	
Somewhat agree		
...		
...		
Work, Health	314	
Neutral	415	
Somewhat agree	536	
Completely disagree	334	
Work, Relationship	514	
Completely agree		
Somewhat agree		
		You feel, your
life is sad, as there is no joy in your life anymore \		
Which of the following sources of stress are mo...		
Acedamics	15	
Completely disagree		

Completely agree	39
Somewhat agree	127
Neutral	129
Completely disagree	130
...	
...	
Work, Health	314
Completely disagree	415
Neutral	536
Completely disagree	334
Work, Relationship	514
Completely disagree	
Somewhat agree	

You have been
 very irritated and angry recently and having mood swings \

Which of the following sources of stress are mo...

Acedamics	15
Somewhat agree	39
Completely agree	127
Somewhat agree	129
Completely agree	130
Completely disagree	
...	
...	
Work, Health	314
Completely agree	415
Completely agree	536
Completely disagree	334
Work, Relationship	
Neutral	514
Completely disagree	

Little interest
 or pleasure in doing things, you enjoy or Feel to have less

interaction with Social network. \

Which of the following sources of stress are mo...

Acedamics	15
No	
	39
Yes	
	127
No	
	129
Yes	
	130
Yes	
...	
...	
Work, Health	314
No	
	415
Yes	
	536
Yes	
Work, Relationship	334
Yes	
	514
Yes	

Do you observed

changes in food habits? \

Which of the following sources of stress are mo...

Acedamics	15
No	
	39
No	
	127
No	
	129
Yes	
	130
No	
...	
...	
Work, Health	314
Yes	
	415
Yes	
	536
Yes	
Work, Relationship	334
Yes	

No	514
How often do you experience trouble sleeping \	
Which of the following sources of stress are mo...	
Acedamics	15
Rarely	39
Never	127
Frequently	129
Occassionally	130
Rarely	
...	
...	
Work, Health	314
Occassionally	415
Rarely	536
Frequently	
Work, Relationship	334
Never	514
Rarely	
Do you often experience physical symptoms like headaches or muscle tension when stressed? \	
Which of the following sources of stress are mo...	
Acedamics	15
Never	39
Never	127
Frequently	129
Frequently	130
Rarely	
...	
...	
Work, Health	314
Occassionally	415

Occassionally	536
Frequently	
Work, Relationship	334
Never	
	514
Never	

View of yourself? \

Which of the following sources of stress are mo...

Acedamics	15	You Feel more
self blaming ,for every mistakes...		
	39	You see
yourself as equally worthwhile as others		
	127	You
Feel like You Cause Problems to Others		
	129	You Feel more
self blaming ,for every mistakes...		
	130	You see
yourself as equally worthwhile as others		
...		
...		
Work, Health	314	You see
yourself as equally worthwhile as others		
	415	You see
yourself as equally worthwhile as others		
	536	You see
yourself as equally worthwhile as others		
Work, Relationship	334	You Feel more
self blaming ,for every mistakes...		
	514	You Feel more
self blaming ,for every mistakes...		

Thoughts that

you would be better off dead, or of hurting yourself in some way? \

Which of the following sources of stress are mo...

Acedamics	15
Completely disagree	
	39
Somewhat agree	
	127
Completely disagree	
	129
Somewhat agree	
	130
Completely disagree	
...	

...	
Work, Health	314
Somewhat agree	
	415
Completely disagree	
	536
Somewhat agree	
Work, Relationship	334
Completely disagree	
	514
Somewhat agree	

How would you
rate your overall stress level on a scale from 1 (low) to 5 (high)
[Stress Level] \

Which of the following sources of stress are mo...

Acedamics	15
3	
	39
4	
	127
3	
	129
3	
	130
2	
...	
...	
Work, Health	314
3	
	415
2	
	536
4	
Work, Relationship	334
2	
	514
3	

Overall, do you
believe that stress significantly affects your daily life and well-
being? \

Which of the following sources of stress are mo...

Acedamics	15
Yes, significantly	
	39
Yes, significantly	
	127

Yes, significantly	129
Yes, significantly	130
No, not at all	
...	
...	
Work, Health	314
Yes, significantly	415
Yes, significantly	536
Yes, significantly	
Work, Relationship	334
No, not at all	514
No, not at all	

	Age	
Which of the following sources of stress are mo...		
Acedamics	15	17.0
	39	18.0
	127	18.0
	129	16.0
	130	17.0
...		...
Work, Health	314	18.0
	415	19.0
	536	18.0
Work, Relationship	334	17.0
	514	16.0

[138 rows x 19 columns]

```
group_sizes_df =
Inter_second_year_groupby.size().reset_index(name='Group Size')
```

```
# Find the row with the maximum size
max_group_row = group_sizes_df[group_sizes_df['Group Size'] ==
group_sizes_df['Group Size'].max()]
```

```
# Display the row with the maximum size
max_group_row
```

Which of the following sources of stress are most significant in your life? (Select all that apply)	\
0	Acedamics

	Group Size
0	103

- **From the Above analysis we can say that Inter Second Year/P2 Students are Feeling Stress more from Acedamics**

Age Categorie of Inter Second Year/P2 Students

```
group_by_age
group_sizes_df = group_by_age.size().reset_index(name='Group Size')

# Find the row with the maximum size
max_group_row = group_sizes_df[group_sizes_df['Group Size'] ==
group_sizes_df['Group Size'].max()]

# Display the row with the maximum size
max_group_row
```

	Age	Group Size
4	18-20	260

Effect of Concentration

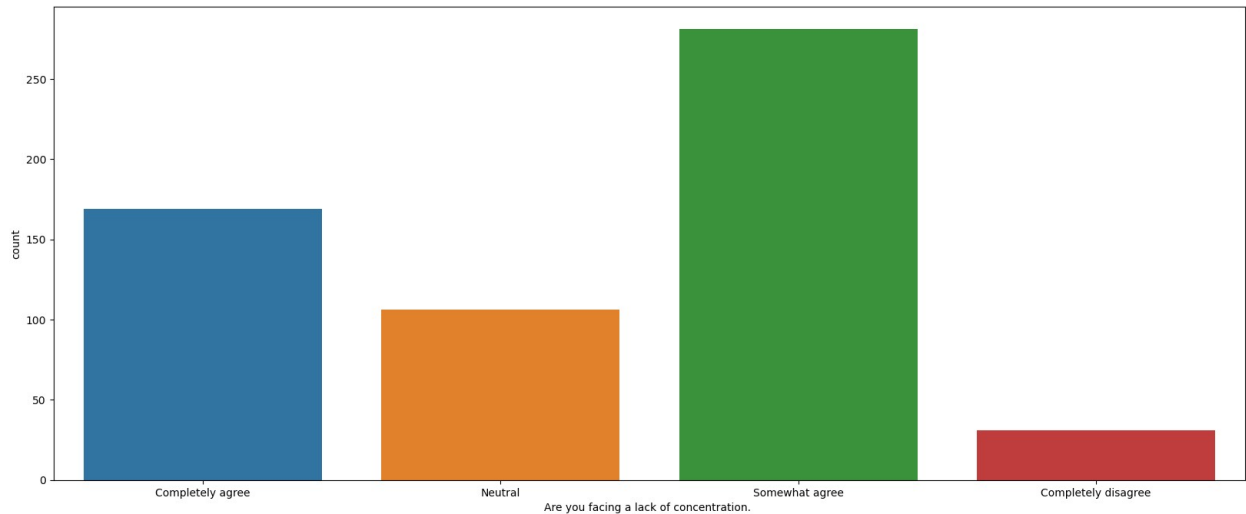
```
lack_of_concentration=df2['Are you facing a lack of concentration. ']
lack_of_concentration

0      Completely agree
1           Neutral
2      Somewhat agree
3      Somewhat agree
4      Completely agree
...
611     Somewhat agree
612           Neutral
613     Somewhat agree
614     Completely agree
616     Completely agree
Name: Are you facing a lack of concentration. , Length: 587, dtype:
object

plt.figure(figsize=(20,8))
sns.countplot(lack_of_concentration)
plt.show()

C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\
_decorators.py:36: FutureWarning: Pass the following variable as a
```

```
keyword arg: x. From version 0.12, the only valid positional argument
will be `data`, and passing other arguments without an explicit
keyword will result in an error or misinterpretation.
warnings.warn()
```

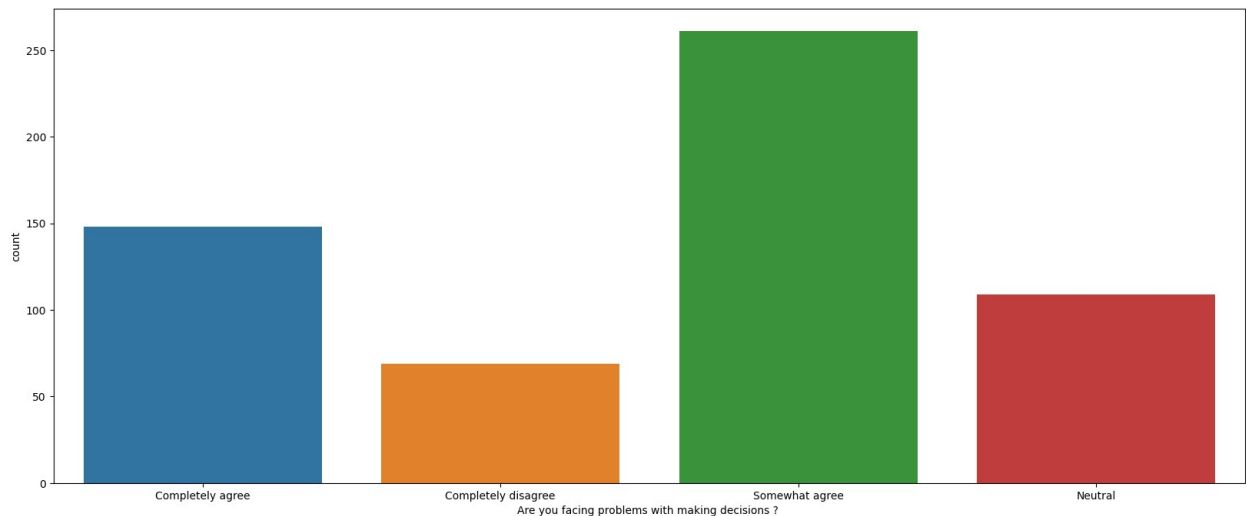


- Many of the student not losing concentration they partially agree

Are they facing problems with making decisions or not ?

```
decision_making=df['Are you facing problems with making decisions ? ']  
plt.figure(figsize=(20,8))  
sns.countplot(decision_making)  
plt.show()
```

```
C:\Users\Arigala.Adarsh\anaconda3\lib\site-packages\seaborn\  
_decorators.py:36: FutureWarning: Pass the following variable as a  
keyword arg: x. From version 0.12, the only valid positional argument  
will be `data`, and passing other arguments without an explicit  
keyword will result in an error or misinterpretation.  
warnings.warn()
```



- Many of the student not facing difficult in decision making when they feeling stress

How many have observed changes in food habits?

```
group_by_food_habits=df2.groupby(['Do you observed changes in food habits?'],as_index='False')
```

```
group_sizes_df = group_by_food_habits.size().reset_index(name='Group Size')
```

```
group_sizes_df
```

	Do you observed changes in food habits?	Group Size
0	No	296
1	Yes	291

- There were observed changes in food habits for both "Yes" (291) and "No" (296) responses.

How many often experience physical symptoms like headaches or muscle tension when stressed ?

```
group_by_physical_symptoms=df2.groupby(['Do you often experience physical symptoms like headaches or muscle tension when stressed?'],as_index='False')
```

```
group_sizes_df = group_by_physical_symptoms.size().reset_index(name='Group Size')
```

```
group_sizes_df
```

	Do you often experience physical symptoms like headaches or muscle tension when stressed?	\
--	---	---

0	Frequently
1	Never
2	Occasionally
3	Rarely

	Group Size
0	145
1	100
2	140
3	202

- The data suggests that individuals frequently experience physical symptoms like headaches or muscle tension when stressed, with occasional occurrences being the next most common response.

```

symptoms = df2[['Age', ' Do you often experience physical symptoms
like headaches or muscle tension when stressed? ']]
group_by_physical_symptoms_Age = symptoms.groupby(['Age'],
as_index=False)

group_sizes_df = group_by_physical_symptoms_Age.size()
group_sizes_df

```

	Age	size
0	10-12	0
1	12-14	0
2	14-16	1
3	16-18	150
4	18-20	260
5	20-25	173

- The majority of individuals falling within the age group of 16-18 reported experiencing physical symptoms like headaches or muscle tension when stressed, with a total count of 150.
- Age groups 10-12, 12-14, and 20-25 showed no reported instances of experiencing physical symptoms when stressed, each with a count of 0.
- There's a minimal number of individuals aged 14-16 and 20-25, each with 1 reported instance of experiencing physical symptoms when stressed.

Thoughts that you would be better off dead, or of hurting yourself in some way?

```
group_by_Thoughts=df2.groupby(['Thoughts that you would be better off  
dead, or of hurting yourself in some way? ',],as_index=False')
```

```
group_sizes_thoughts =  
group_by_Thoughts.size().reset_index(name='Group Size')
```

```
group_sizes_thoughts
```

```
Thoughts that you would be better off dead, or of hurting yourself  
in some way? \
```

```
0 Completely agree
```

```
1 Completely disagree
```

```
2 Somewhat agree
```

```
Group Size  
0 56  
1 372  
2 159
```

- 372 individuals completely disagree with the thought that they would be better off dead or of hurting themselves in some way.
- 159 individuals somewhat agree with the thought.
- 56 individuals completely agree with the thought.
- This suggests varying levels of agreement with potentially concerning thoughts among the surveyed individuals.

```
group_by_believe=df2.groupby(['Overall, do you believe that stress  
significantly affects your daily life and well-being?  
,],as_index=False')
```

```
group_sizes_believe = group_by_believe.size().reset_index(name='Group  
Size')
```

```
group_sizes_believe
```

```
Overall, do you believe that stress significantly affects your daily  
life and well-being? \
```

```
0 No, not at all
```

```
1 Yes, significantly
```

```
2 Yes, to some extent
```

```
Group Size
```

0	155
1	431
2	1

- **431 individuals believe that stress significantly affects their daily life and well-being.**
- **155 individuals do not believe that stress affects their daily life and well-being at all.**
- **There is 1 individual who believes stress affects their daily life and well-being to some extent.**
- **This indicates a significant portion of individuals acknowledging the impact of stress on their daily lives and well-being.**

```
believe= df2[['Age','Overall, do you believe that stress significantly
affects your daily life and well-being? ']]
group_by_believe_Age = believe.groupby(['Age'], as_index=False)
group_sizes_believe_Age_group = group_by_believe_Age.size()
group_sizes_believe_Age_group
```

	Age	size
0	10-12	0
1	12-14	0
2	14-16	1
3	16-18	150
4	18-20	260
5	20-25	173

- **Among individuals aged 16-18, a significant portion of 150 individuals acknowledge that stress significantly affects their daily life and well-being.**
- **Individuals aged 18-20 show a higher awareness, with 260 individuals believing that stress has a significant impact.**
- **In the age group of 20-25, 173 individuals also recognize the significant effect of stress on their daily lives.**
- **Age groups 10-12 and 12-14 exhibit no reported instances of individuals believing stress significantly affects their daily life and well-being.**
- **This suggests that as individuals grow older, they tend to become more aware of the impact of stress on their lives, with a notable increase in acknowledgment during late adolescence and early adulthood.**