

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

```
df = pd.read_csv(r"C:\Users\hp\Desktop\FIELD PROJECT FORM .csv")
df
```

	gender	age_cat	rel_stat	
fin_state \				
0	Male	18 to 20	Single	Partially independent (earn a little)
1	Female	20 to 30	Married	Fully financially independent
2	Female	30 to 40	Married	Fully financially independent
3	Female	40 to 50	Single	Fully financially independent
4	Female	18 to 20	In Relationship	Fully dependent
..	
...				
299	Female	20 to 30	Married	Fully financially independent
300	Female	18 to 20	Single	Fully dependent
301	Male	18 to 20	Single	Fully dependent
302	Male	18 to 20	Single	Partially independent (earn a little)
303	Female	18 to 20	Single	Fully dependent

	residence	m_essentiality	age_ideal \
0	Urban	Yes	21-25
1	Urban	Yes	25-30
2	Urban	Yes	25-30
3	Urban	No	30-35
4	Urban	No	25-30
..
299	Urban	Yes	I don't think there is any ideal age
300	Rural	Yes	25-30
301	Urban	Yes	25-30
302	Rural	Yes	25-30
303	Urban	Yes	21-25

	partner_earn	spend_wed \
0	Maybe	Court marriage/ Small scale wedding
1	No	Half or more than half
2	No	Court marriage/ Small scale wedding
3	Yes	Court marriage/ Small scale wedding

4	Maybe	Court marriage/ Small scale wedding
..
299	Yes	Court marriage/ Small scale wedding
300	Maybe	Half or more than half
301	Maybe	Full amount saved for marriage
302	Yes	Full amount saved for marriage
303	Maybe	Half or more than half

	Hfin_contri	...	\
0	70M-30F	...	
1	50M-50F	...	
2	In proportion to your earning	...	
3	In proportion to your earning	...	
4	In proportion to your earning	...	
..	
299	In proportion to your earning	...	
300	50M-50F	...	
301	In proportion to your earning	...	
302	In proportion to your earning	...	
303	70M-30F	...	

	m_concerns	\
0	Loss of freedom;Other	
1	Other	
2	Family pressure	
3	Loss of freedom;Compatibility;Loss of emotiona...	
4	Family pressure	
..	...	
299	Other	
300	Loss of emotional/mental stability	
301	Loss of freedom;Other	
302	Other	
303	Other	

	m_consider	cost_wed
Pfin_share \		
0	Emotional Companionship	Depends on financial situation
Yes		
1	Emotional Companionship	Depends on financial situation
Yes		
2	Emotional Companionship	Yes
Yes		
3	I do not wish to get married	Depends on financial situation
Yes		
4	Emotional Companionship	Depends on financial situation
Yes		
..
...		
299	Emotional Companionship	Depends on financial situation
Yes		

300	Emotional Companionship	Yes
Yes		
301	Emotional Companionship	Depends on financial situation
Yes		
302	Parenthood	Depends on financial situation
Yes		
303	Parenthood	Depends on financial situation
Yes		

	j_property \
0	Depends
1	Yes
2	Yes
3	NaN
4	Yes
..	...
299	Yes
300	Depends
301	No
302	Depends
303	No

[I believe marriage should be postponed until both partners are financially stable.] \

0	Agree
1	Strongly agree
2	Agree
3	Agree
4	Strongly agree
..	...
299	Neutral
300	Strongly agree
301	Strongly agree
302	Neutral
303	Agree

[I feel pressure from society to get married.] \

0	Neutral
1	Strongly disagree
2	Disagree

3	Strongly disagree
4	Strongly disagree
..	...
299	Strongly disagree
300	Neutral
301	Strongly disagree
302	Disagree
303	Disagree

[Financial compatibility is more important than romantic compatibility] \

0	Strongly disagree
1	Disagree
2	Agree
3	Strongly agree
4	Neutral
..	...
299	Neutral
300	Neutral
301	Neutral
302	Disagree
303	Agree

[Overall compatibility is more important than romantic compatibility] \

0	Strongly agree
1	Agree
2	Agree
3	Strongly agree
4	Neutral
..	...
299	Disagree
300	Agree

301	Agree
-----	-------

302	Disagree
-----	----------

303	Strongly agree
-----	----------------

[I would rather stay single than settle for a partner who doesn't meet my standards.]

0	Strongly agree
---	----------------

1	Strongly disagree
---	-------------------

2	Agree
---	-------

3	Strongly agree
---	----------------

4	Strongly agree
---	----------------

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

299	Strongly disagree
-----	-------------------

300	Neutral
-----	---------

301	Agree
-----	-------

302	Neutral
-----	---------

303	Strongly agree
-----	----------------

[304 rows x 30 columns]

df.isnull()

	gender	age_cat	rel_stat	fin_state	residence	
m_essentiality \						
0	False	False	False	False	False	False
1	False	False	False	False	False	False
2	False	False	False	False	False	False
3	False	False	False	False	False	False
4	False	False	False	False	False	False
..
299	False	False	False	False	False	False

300	False	False	False	False	False	False
301	False	False	False	False	False	False
302	False	False	False	False	False	False
303	False	False	False	False	False	False

	age_ideal	partner_earn	spend_wed	Hfin_contri	...	m_concerns
\						
0	False	False	False	False	...	False
1	False	False	False	False	...	False
2	False	False	False	False	...	False
3	False	False	False	False	...	False
4	False	False	False	False	...	False
..
299	False	False	False	False	...	False
300	False	False	False	False	...	False
301	False	False	False	False	...	False
302	False	False	False	False	...	False
303	False	False	False	False	...	False

	m_consider	cost_wed	Pfin_share	j_property	\
0	False	False	False	False	
1	False	False	False	False	
2	False	False	False	False	
3	False	False	False	True	
4	False	False	False	False	
..	
299	False	False	False	False	
300	False	False	False	False	
301	False	False	False	False	
302	False	False	False	False	
303	False	False	False	False	

[I believe marriage should be postponed until both partners are financially stable.]	\
0	False

1	False
2	False
3	False
4	False
..	...
299	False
300	False
301	False
302	False
303	False

	[I feel pressure from society to get married.] \
0	False
1	False
2	False
3	False
4	False
..	...
299	False
300	False
301	False
302	False
303	False

	[Financial compatibility is more important than romantic compatibility] \
0	False
1	False
2	False
3	False
4	False
..	...
299	False

300	False
301	False
302	False
303	False

[Overall compatibility is more important than romantic compatibility] \

0	False
1	False
2	False
3	False
4	False
..	...

299	False
300	False
301	False
302	False
303	False

[I would rather stay single than settle for a partner who doesn't meet my standards.]

0	False
1	False
2	False
3	False
4	False
..	...
299	False
300	False

301 False

302 False

303 False

[304 rows x 30 columns]

df.isna()

	gender	age_cat	rel_stat	fin_state	residence	
m_essentiality \						
0	False	False	False	False	False	False
1	False	False	False	False	False	False
2	False	False	False	False	False	False
3	False	False	False	False	False	False
4	False	False	False	False	False	False
..
299	False	False	False	False	False	False
300	False	False	False	False	False	False
301	False	False	False	False	False	False
302	False	False	False	False	False	False
303	False	False	False	False	False	False

	age_ideal	partner_earn	spend_wed	Hfin_contri	...	m_concerns
\						
0	False	False	False	False	...	False
1	False	False	False	False	...	False
2	False	False	False	False	...	False
3	False	False	False	False	...	False
4	False	False	False	False	...	False
..
299	False	False	False	False	...	False

300	False	False	False	False	...	False
301	False	False	False	False	...	False
302	False	False	False	False	...	False
303	False	False	False	False	...	False

	m_consider	cost_wed	Pfin_share	j_property	\
0	False	False	False	False	
1	False	False	False	False	
2	False	False	False	False	
3	False	False	False	True	
4	False	False	False	False	
..	
299	False	False	False	False	
300	False	False	False	False	
301	False	False	False	False	
302	False	False	False	False	
303	False	False	False	False	

[I believe marriage should be postponed until both partners are financially stable.] \

0	False
1	False
2	False
3	False
4	False
..	...
299	False
300	False
301	False
302	False
303	False

	[I feel pressure from society to get married.] \
0	False
1	False
2	False

3	False
4	False
..	...
299	False
300	False
301	False
302	False
303	False

[Financial compatibility is more important than romantic compatibility] \

0	False
1	False
2	False
3	False
4	False
..	...
299	False
300	False
301	False
302	False
303	False

[Overall compatibility is more important than romantic compatibility] \

0	False
1	False
2	False
3	False
4	False
..	...
299	False
300	False

301	False
302	False
303	False

[I would rather stay single than settle for a partner who doesn't meet my standards.]

0	False
1	False
2	False
3	False
4	False
..	...
299	False
300	False
301	False
302	False
303	False

[304 rows x 30 columns]

df.info()

<class 'pandas.core.frame.DataFrame'>

RangeIndex: 304 entries, 0 to 303

Data columns (total 30 columns):

#	Column	Non-Null Count	Dtype
0	gender	304 non-null	object
1	age_cat	304 non-null	object
2	rel_stat	304 non-null	object
3	fin_state		

```

304 non-null    object
4   residence
304 non-null    object
5   m_essentiality
304 non-null    object
6   age_ideal
304 non-null    object
7   partner_earn
304 non-null    object
8   spend_wed
304 non-null    object
9   Hfin_contri
304 non-null    object
10  pri_goals
304 non-null    object
11  pref_earn
212 non-null    object
12  Hfin_handel
304 non-null    object
13  e_f_comp
304 non-null    object
14  social_eff
304 non-null    object
15  idel_childn
304 non-null    object
16  prep_childn
304 non-null    object
17  prenup
304 non-null    object
18  fin_freedom
304 non-null    object
19  sup_debt
304 non-null    object
20  m_concerns
304 non-null    object
21  m_consider
304 non-null    object
22  cost_wed
304 non-null    object
23  Pfin_share
304 non-null    object
24  j_property
303 non-null    object
25  [I believe marriage should be postponed until both partners are
financially stable.] 304 non-null    object
26  [I feel pressure from society to get married.]
304 non-null    object
27  [Financial compatibility is more important than romantic
compatibility]      304 non-null    object

```

```

28  [Overall compatibility is more important than romantic
compatibility ]          304 non-null    object
29  [I would rather stay single than settle for a partner who
doesn't meet my standards.] 304 non-null    object
dtypes: object(30)
memory usage: 71.4+ KB

print(df.columns.tolist())

['gender', 'age_cat', 'rel_stat', 'fin_state', 'residence',
'm_essentiality', 'age_ideal', 'partner_earn', 'spend_wed',
'Hfin_contri', 'pri_goals', 'pref_earn', 'Hfin_handel', 'e_f_comp',
'social_eff', 'idel_childn', 'prep_childn', 'prenup', 'fin_freedome',
'sup_debt', 'm_concerns ', 'm_consider', 'cost_wed', 'Pfin_share',
'j_property', ' [I believe marriage should be postponed until both
partners are financially stable.]', ' [I feel pressure from society to
get married.]', ' [Financial compatibility is more important than
romantic compatibility]', ' [Overall compatibility is more important
than romantic compatibility ]', " [I would rather stay single than
settle for a partner who doesn't meet my standards.]"]

df["gender"].value_counts()

gender
Female    178
Male      126
Name: count, dtype: int64

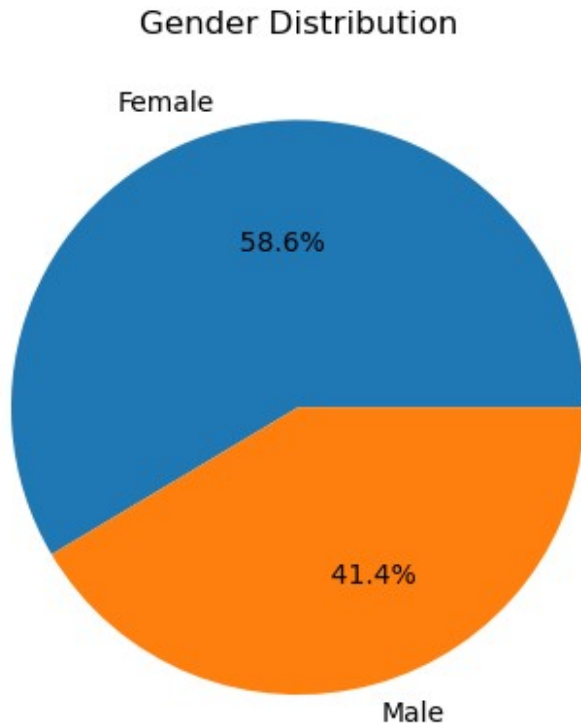
```

Basic 1

```

plt.pie(
    df["gender"].value_counts(),
    labels=df["gender"].value_counts().index,
    autopct='%11.1f%%'
)
plt.title("Gender Distribution")
plt.show()

```



Male to Female ratio

Female = 58.6% (178)

Male = 41.4% (126)

Male:Female = (41.4 : 58.6) = (0.71 : 1)

Interpretation

The gender distribution of the respondents shows that 58.6% (178) are female and 41.4% (126) are male, giving a male-to-female ratio of approximately (0.71 : 1) . This indicates that the sample is slightly female-dominated, which may influence the overall interpretation of marriage choice patterns in the study.

df

	gender	age_cat	rel_stat
fin_state \			
0	Male	18 to 20	Single Partially independent (earn a little)
1	Female	20 to 30	Married Fully financially independent
2	Female	30 to 40	Married Fully financially independent
3	Female	40 to 50	Single Fully financially independent

independent					
4	Female	18 to 20	In Relationship		Fully
dependent					
..		
...					
299	Female	20 to 30	Married	Fully financially	
independent					
300	Female	18 to 20	Single		Fully
dependent					
301	Male	18 to 20	Single		Fully
dependent					
302	Male	18 to 20	Single	Partially independent (earn a little)	
303	Female	18 to 20	Single		Fully
dependent					

	residence	m_essentiality		age_ideal	\
0	Urban	Yes		21-25	
1	Urban	Yes		25-30	
2	Urban	Yes		25-30	
3	Urban	No		30-35	
4	Urban	No		25-30	
..	
299	Urban	Yes	I don't think there is any ideal age		
300	Rural	Yes		25-30	
301	Urban	Yes		25-30	
302	Rural	Yes		25-30	
303	Urban	Yes		21-25	

	partner_earn		spend_wed	\
0	Maybe	Court marriage/	Small scale wedding	
1	No		Half or more than half	
2	No	Court marriage/	Small scale wedding	
3	Yes	Court marriage/	Small scale wedding	
4	Maybe	Court marriage/	Small scale wedding	
..	
299	Yes	Court marriage/	Small scale wedding	
300	Maybe		Half or more than half	
301	Maybe	Full amount saved for marriage		
302	Yes	Full amount saved for marriage		
303	Maybe		Half or more than half	

	Hfin_contri	...	\
0	70M-30F	...	
1	50M-50F	...	
2	In proportion to your earning	...	
3	In proportion to your earning	...	
4	In proportion to your earning	...	
..	
299	In proportion to your earning	...	

300		50M-50F	...
301	In proportion to your earning		...
302	In proportion to your earning		...
303		70M-30F	...

		m_concerns	\
0		Loss of freedom;Other	
1		Other	
2		Family pressure	
3	Loss of freedom;Compatibility;Loss of emotiona...		
4		Family pressure	
..		...	
299		Other	
300	Loss of emotional/mental stability		
301	Loss of freedom;Other		
302	Other		
303	Other		

		m_consider		cost_wed
Pfin_share	\			
0	Emotional Companionship	Depends on financial situation		
Yes				
1	Emotional Companionship	Depends on financial situation		
Yes				
2	Emotional Companionship		Yes	
Yes				
3	I do not wish to get married	Depends on financial situation		
Yes				
4	Emotional Companionship	Depends on financial situation		
Yes				
..	
...				
299	Emotional Companionship	Depends on financial situation		
Yes				
300	Emotional Companionship		Yes	
Yes				
301	Emotional Companionship	Depends on financial situation		
Yes				
302	Parenthood	Depends on financial situation		
Yes				
303	Parenthood	Depends on financial situation		
Yes				

	j_property	\
0	Depends	
1	Yes	
2	Yes	
3	NaN	
4	Yes	
..	...	

299	Yes
300	Depends
301	No
302	Depends
303	No

[I believe marriage should be postponed until both partners are financially stable.] \

0	Agree
---	-------

1	Strongly agree
---	----------------

2	Agree
---	-------

3	Agree
---	-------

4	Strongly agree
---	----------------

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

299	Neutral
-----	---------

300	Strongly agree
-----	----------------

301	Strongly agree
-----	----------------

302	Neutral
-----	---------

303	Agree
-----	-------

[I feel pressure from society to get married.] \

0	Neutral
---	---------

1	Strongly disagree
---	-------------------

2	Disagree
---	----------

3	Strongly disagree
---	-------------------

4	Strongly disagree
---	-------------------

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

299	Strongly disagree
-----	-------------------

300	Neutral
-----	---------

301	Strongly disagree
-----	-------------------

302	Disagree
-----	----------

303	Disagree
-----	----------

[Financial compatibility is more important than romantic compatibility] \

0	Strongly disagree
---	-------------------

1	Disagree
---	----------

2	Agree
---	-------

3	Strongly agree
---	----------------

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

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

299	Neutral
-----	---------

300	Neutral
-----	---------

301	Neutral
-----	---------

302	Disagree
-----	----------

303	Agree
-----	-------

[Overall compatibility is more important than romantic compatibility] \

0	Strongly agree
---	----------------

1	Agree
---	-------

2	Agree
---	-------

3	Strongly agree
---	----------------

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

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

299	Disagree
-----	----------

300	Agree
-----	-------

301	Agree
-----	-------

302	Disagree
-----	----------

303	Strongly agree
-----	----------------

[I would rather stay single than settle for a partner who doesn't meet my standards.]

0	Strongly agree
---	----------------

1	Strongly disagree
---	-------------------

2	Agree
---	-------

3	Strongly agree
---	----------------

4	Strongly agree
..	...
299	Strongly disagree
300	Neutral
301	Agree
302	Neutral
303	Strongly agree

[304 rows x 30 columns]

```
print(df.columns.tolist()) #print(df.columns.tolist())

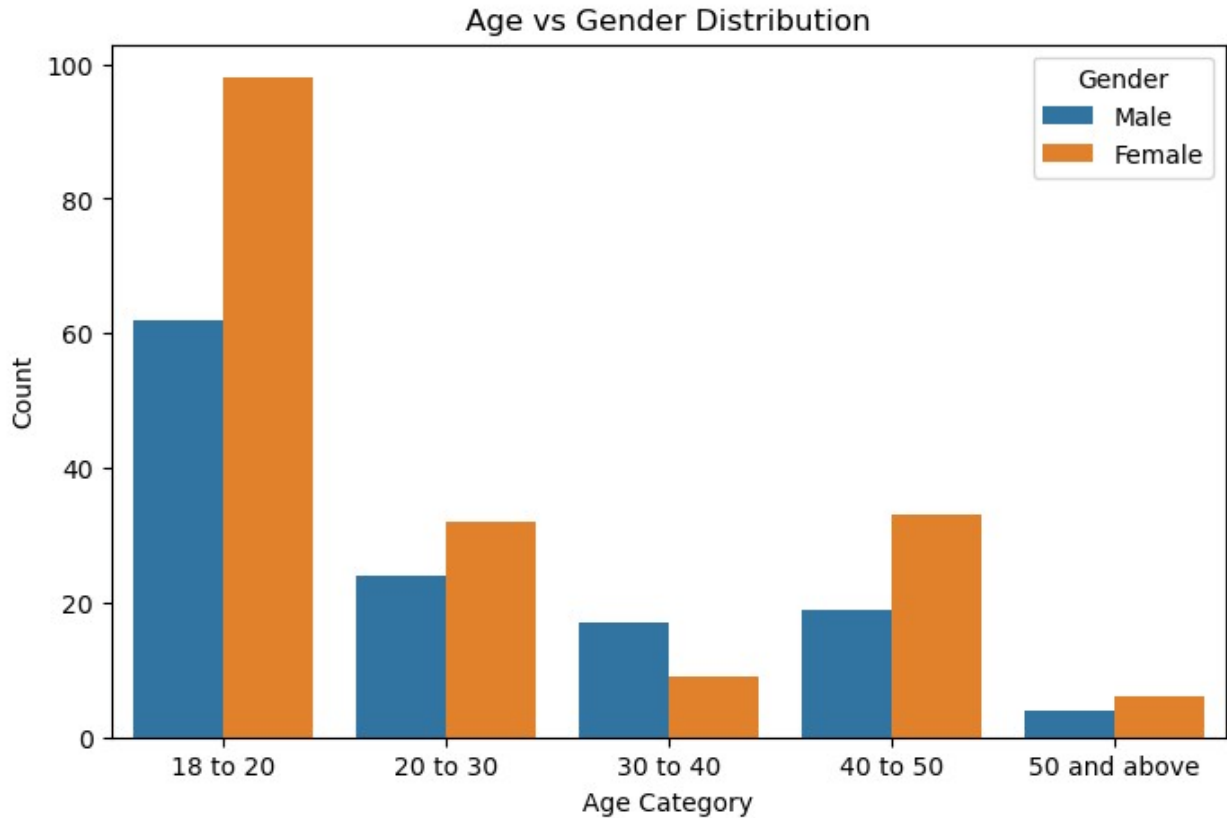
['gender', 'age_cat', 'rel_stat', 'fin_state', 'residence',
'm_essentiality', 'age_ideal', 'partner_earn', 'spend_wed',
'Hfin_contri', 'pri_goals', 'pref_earn', 'Hfin_handel', 'e_f_comp',
'social_eff', 'idel_childn', 'prep_childn', 'prenup', 'fin_freedome',
'sup_debt', 'm_concerns ', 'm_consider', 'cost_wed', 'Pfin_share',
'j_property', ' [I believe marriage should be postponed until both
partners are financially stable.]', ' [I feel pressure from society to
get married.]', ' [Financial compatibility is more important than
romantic compatibility]', ' [Overall compatibility is more important
than romantic compatibility ]', " [I would rather stay single than
settle for a partner who doesn't meet my standards.]"]
```

Basic 2

```
plt.figure(figsize=(8,5))

sns.countplot(
    x="age_cat",          # Age on x-axis
    hue="gender",         # Different colors for Gender
    data=df
)

plt.title("Age vs Gender Distribution")
plt.xlabel("Age Category")
plt.ylabel("Count")
plt.legend(title="Gender")
plt.show()
```



Interpretations

- 1.The age group of 18 to 20 has the highest overall count, with a significantly larger proportion of females compared to males.
- 2.The 40 to 50 age group demonstrates the most balanced distribution, with nearly equal counts for both genders.
- 3.The 50 and above age group contains the lowest count of males.
- 4.There is a clear gender distribution pattern across the age groups, with females dominating the younger categories (18-20, 20-30) and males having a slight majority in the middle-aged category (30-40).

```
# plt.figure(figsize=(9,5))
# sns.countplot(
#     x="age_cat", # Age on x-axis
#     hue="rel_stat", # Different colors for Relationship Status
#     data=df,
# )
# plt.xlabel("Age Category")
# plt.ylabel("Count")
# plt.title("Age vs Relationship Status Distribution")
```

```

# plt.legend(title="Relationship Status")
# plt.show()

df.columns.tolist()

['gender',
 'age_cat',
 'rel_stat',
 'fin_state',
 'residence',
 'm_essentiality',
 'age_ideal',
 'partner_earn',
 'spend_wed',
 'Hfin_contri',
 'pri_goals',
 'pref_earn',
 'Hfin_handel',
 'e_f_comp',
 'social_eff',
 'idel_childn',
 'prep_childn',
 'prenup',
 'fin_freedome',
 'sup_debt',
 'm_concerns ',
 'm_consider',
 'cost_wed',
 'Pfin_share',
 'j_property',
 ' [I believe marriage should be postponed until both partners are
financially stable.]',
 ' [I feel pressure from society to get married.]',
 ' [Financial compatibility is more important than romantic
compatibility]',
 ' [Overall compatibility is more important than romantic
compatibility ]',
 " [I would rather stay single than settle for a partner who doesn't
meet my standards.]" ]

```

Q6

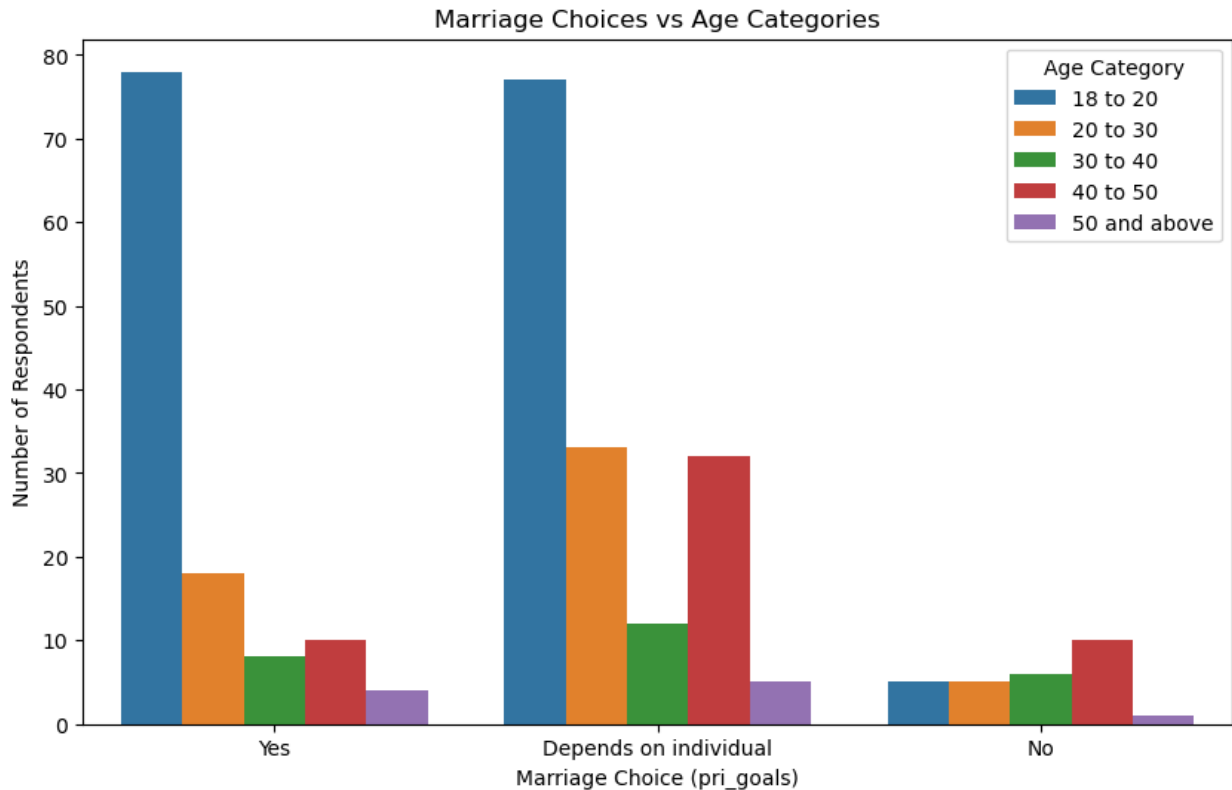
```

plt.figure(figsize=(10,6))

sns.countplot(
    data=df,
    x="pri_goals",
    hue="age_cat"      # separate bars for each age category
)

```

```
plt.title("Marriage Choices vs Age Categories")
plt.xlabel("Marriage Choice (pri_goals)")
plt.ylabel("Number of Respondents")
plt.legend(title="Age Category")
plt.show()
```



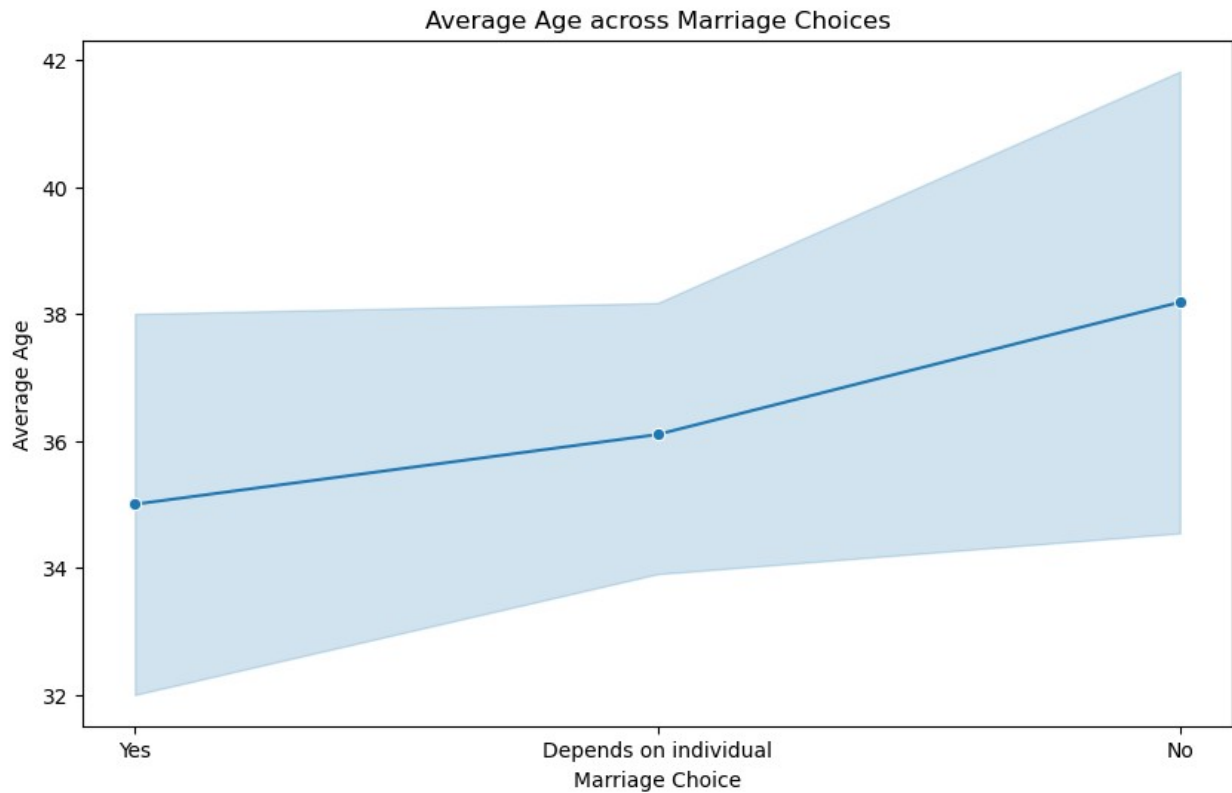
```
# Example: map categories to numeric midpoints
df["age_num"] = df["age_cat"].map({
    "20 to 30": 25,
    "30 to 40": 35,
    "40 to 50": 45,
    "50 and above": 55
})

plt.figure(figsize=(10,6))

sns.lineplot(
    x="pri_goals",
    y="age_num",
    data=df,
    estimator="mean", # plots average age per category
    marker="o"
)

plt.title("Average Age across Marriage Choices")
```

```
plt.xlabel("Marriage Choice")
plt.ylabel("Average Age")
plt.show()
```



Q15

```
df.columns.tolist()
```

```
['gender',
 'age_cat',
 'rel_stat',
 'fin_state',
 'residence',
 'm_essentiality',
 'age_ideal',
 'partner_earn',
 'spend_wed',
 'Hfin_contri',
 'pri_goals',
 'pref_earn',
 'Hfin_handel',
 'e_f_comp',
 'social_eff',
 'idel_childn',
 'prep_childn',
```



```

'prenup',
'fin_freedom',
'sup_debt',
'm_concerns ',
'm_consider',
'cost_wed',
'Pfin_share',
'j_property',
' [I believe marriage should be postponed until both partners are
financially stable.]',
' [I feel pressure from society to get married.]',
' [Financial compatibility is more important than romantic
compatibility]',
' [Overall compatibility is more important than romantic
compatibility ]',
" [I would rather stay single than settle for a partner who doesn't
meet my standards.]",
'age_num']

```

```
df["sup_debt"].value_counts()
```

```

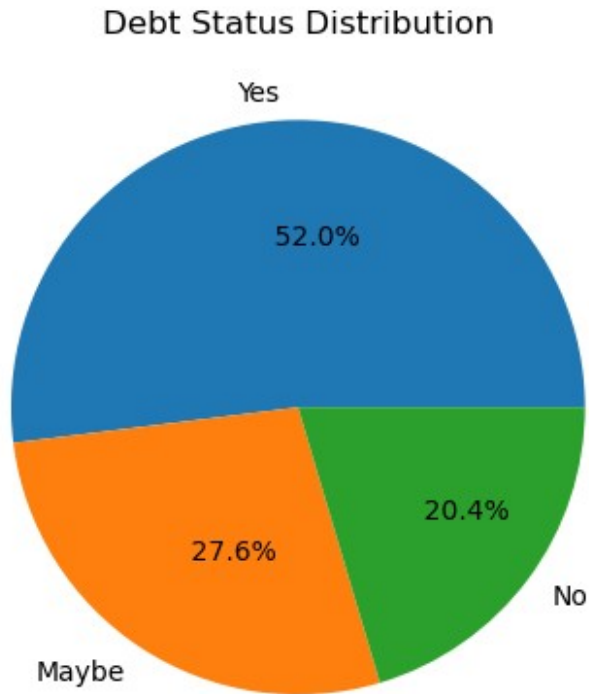
sup_debt
Yes      158
Maybe   84
No       62
Name: count, dtype: int64

```

```

plt.pie(
    df["sup_debt"].value_counts(),
    labels=df["sup_debt"].value_counts().index,
    autopct='%11.1f%%'
)
plt.title("Debt Status Distribution")
plt.show()

```



Interpretations

1. 52.0% of respondents are comfortable with their spouse having debt (e.g., education loan, credit card dues) before marriage.
2. 27.6% of respondents are uncertain, suggesting that acceptance may depend on the nature or size of the debt.
3. 20.4% of respondents are not comfortable with their spouse having any debt before marriage.

The findings indicate that while a majority are open to the idea, a significant proportion remain hesitant or opposed, highlighting the influence of financial liabilities in marital decisions.

Q18

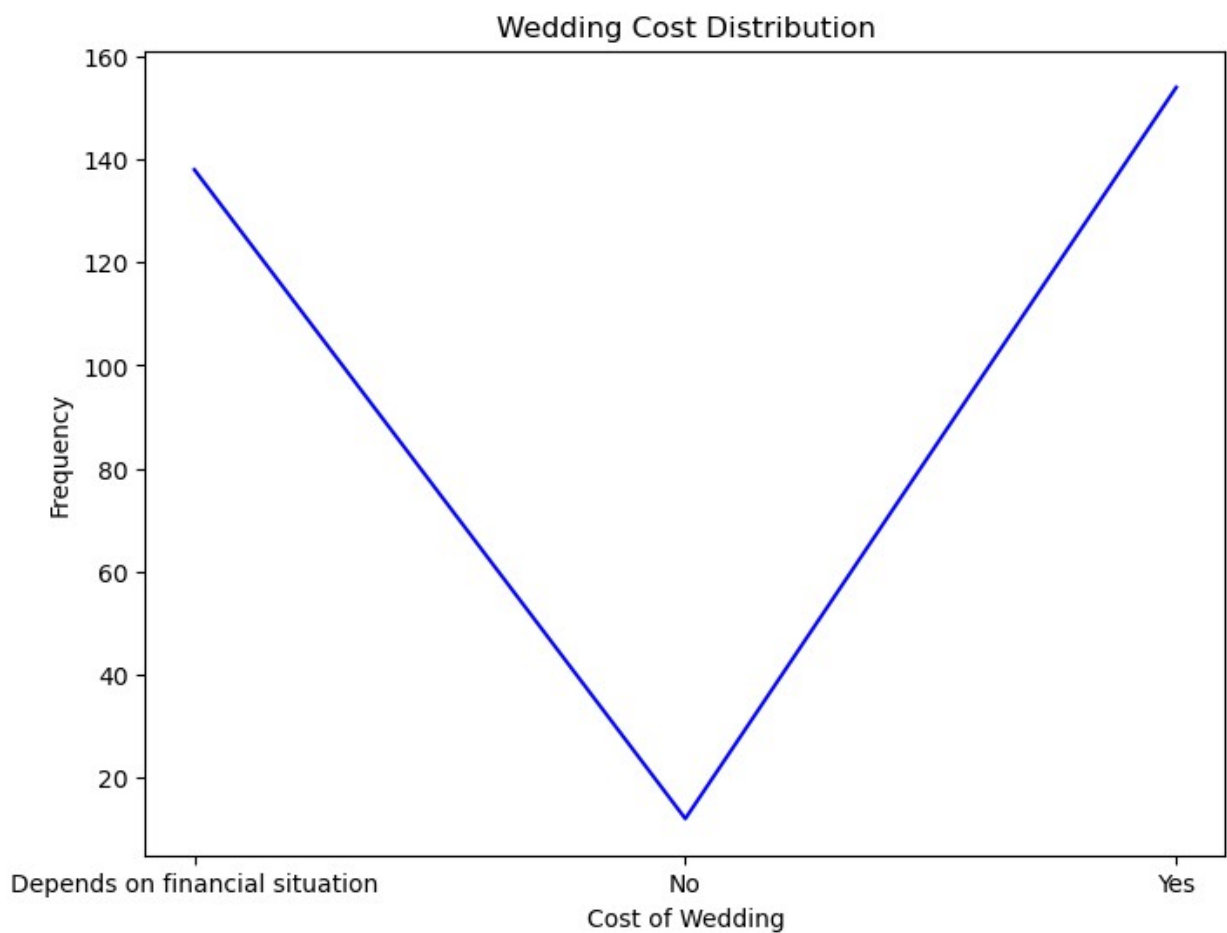
```
df["cost_wed"].value_counts()

cost_wed
Yes                154
Depends on financial situation  138
No                 12
Name: count, dtype: int64

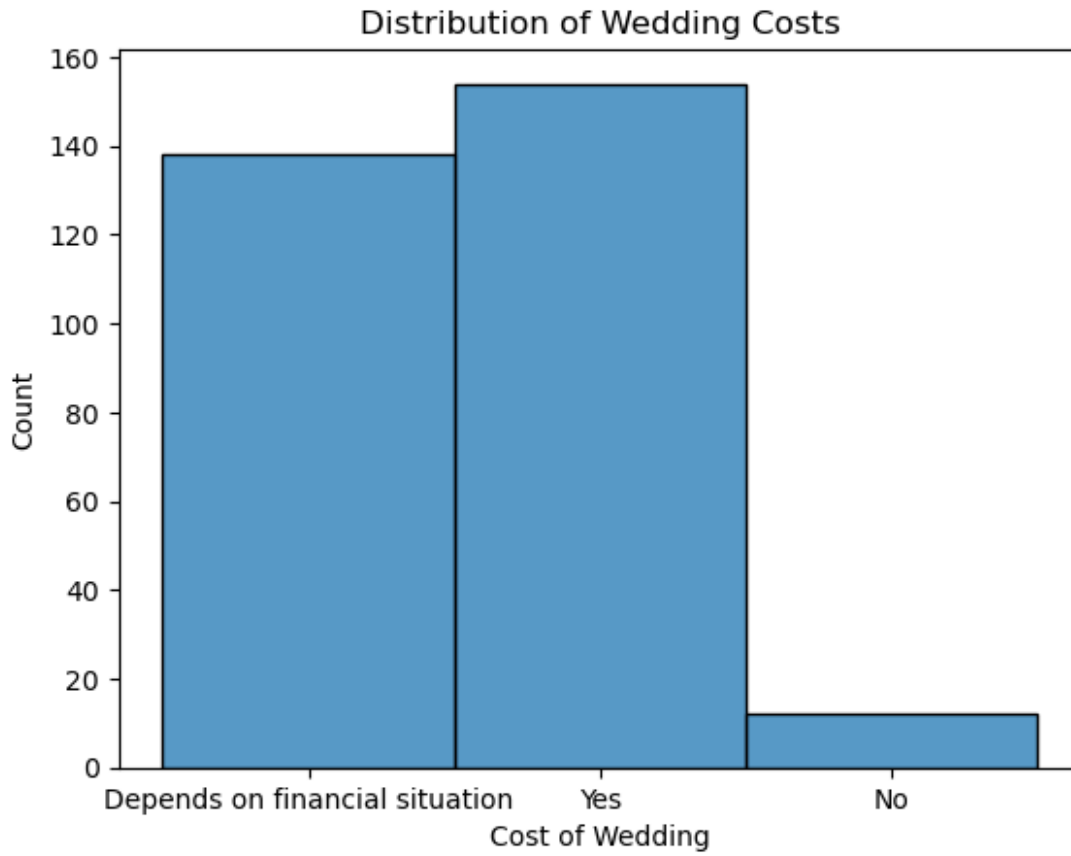
counts = df["cost_wed"].value_counts().sort_index()
```

```
plt.figure(figsize=(8,6))
sns.lineplot(
    x=counts.index,  # unique cost_wed values
    y=counts.values, # their frequencies
    # size of points
    color='blue',
)

plt.title("Wedding Cost Distribution")
plt.xlabel("Cost of Wedding")
plt.ylabel("Frequency")
plt.show()
```



```
sns.histplot(df["cost_wed"], bins=20, kde=False)
plt.title("Distribution of Wedding Costs")
plt.xlabel("Cost of Wedding")
plt.ylabel("Count")
plt.show()
```



Yes: Around 155 respondents agree that both partners should share wedding costs equally, showing strong support for shared responsibility.

Depends on financial situation: About 138 respondents believe cost-sharing should depend on each partner's financial ability, highlighting flexibility and fairness considerations.

No: Only around 12 respondents disagreed, indicating that a very small minority rejects equal cost-sharing.

Interpretations

1. A large majority (Yes + Depends = ~92%) are in favor of some form of shared responsibility for wedding costs.
2. The distribution suggests that while equality is preferred, many also recognize the importance of adjusting contributions based on individual financial capacity.
3. Very few participants completely oppose the idea, showing that traditional views of one-sided financial responsibility are becoming less common.