

```

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

	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	False
301	False	False	False	False	False	False	False
302	False	False	False	False	False	False	False
303	False	False	False	False	False	False	False
\\							
0	age_ideal	partner_earn	spend_wed	Hfin_contr	...	m_concerns	
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
\\							
0	m_consider	cost_wed	Pfin_share	j_property			
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  ...     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
0	m_consider	cost_wed	Pfin_share	j_property	\		
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
```

```
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_chldn
304 non-null    object
16   prep_chldn
304 non-null    object
17   prenup
304 non-null    object
18   fin_freedome
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

```

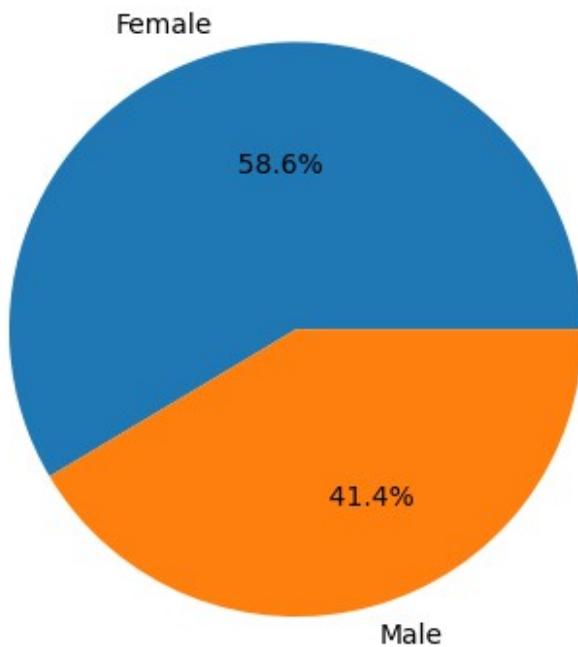
## Basic 1

```

plt.pie(
    df["gender"].value_counts(),
    labels=df["gender"].value_counts().index,
    autopct='%.1f%%'
)
plt.title("Gender Distribution")
plt.show()

```

## Gender Distribution



### 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 little)	Single	Partially independent (earn a
1	Female	20 to 30 independent	Married	Fully financially
2	Female	30 to 40 independent	Married	Fully financially
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                               ...
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
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
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                             ...
300                               ...
301                               Neutral
302                               Agree
303                               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_chldn', 'prep_chldn', '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

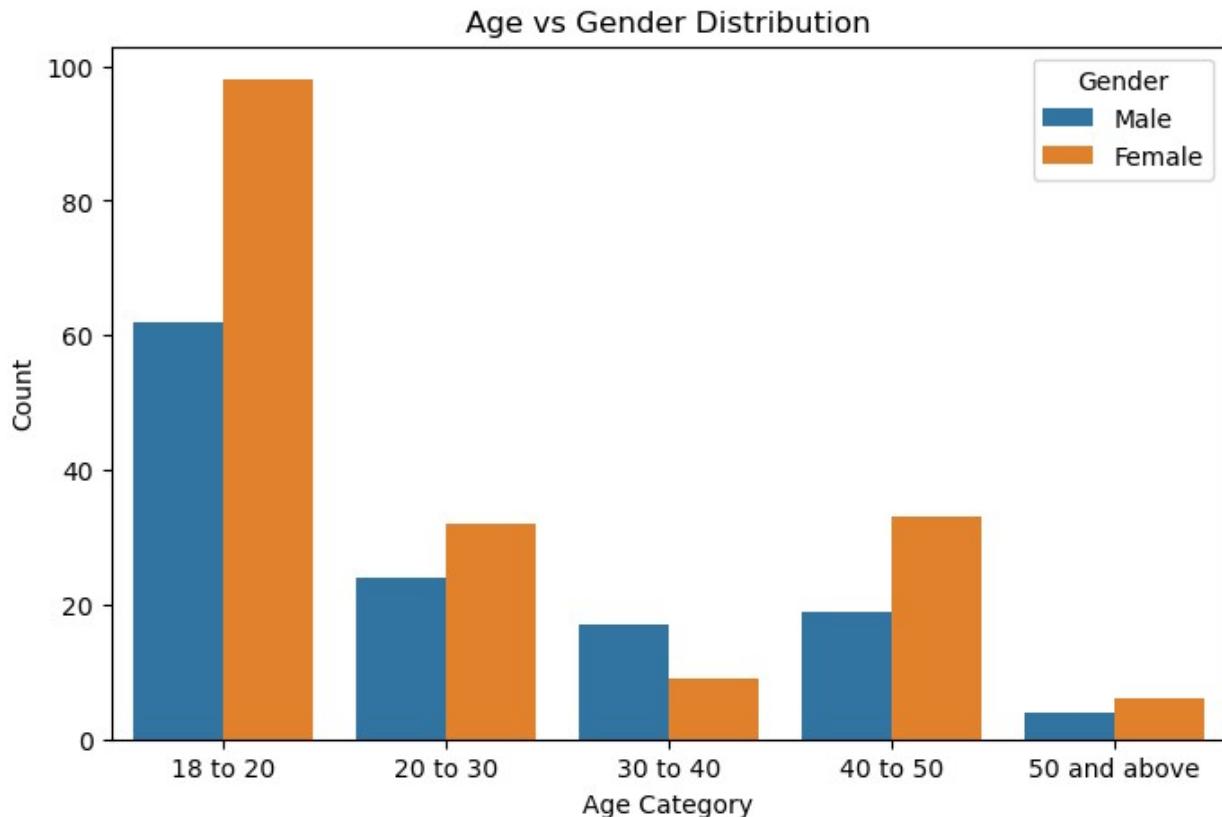
```

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_chldn',
 'prep_chldn',
 '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))

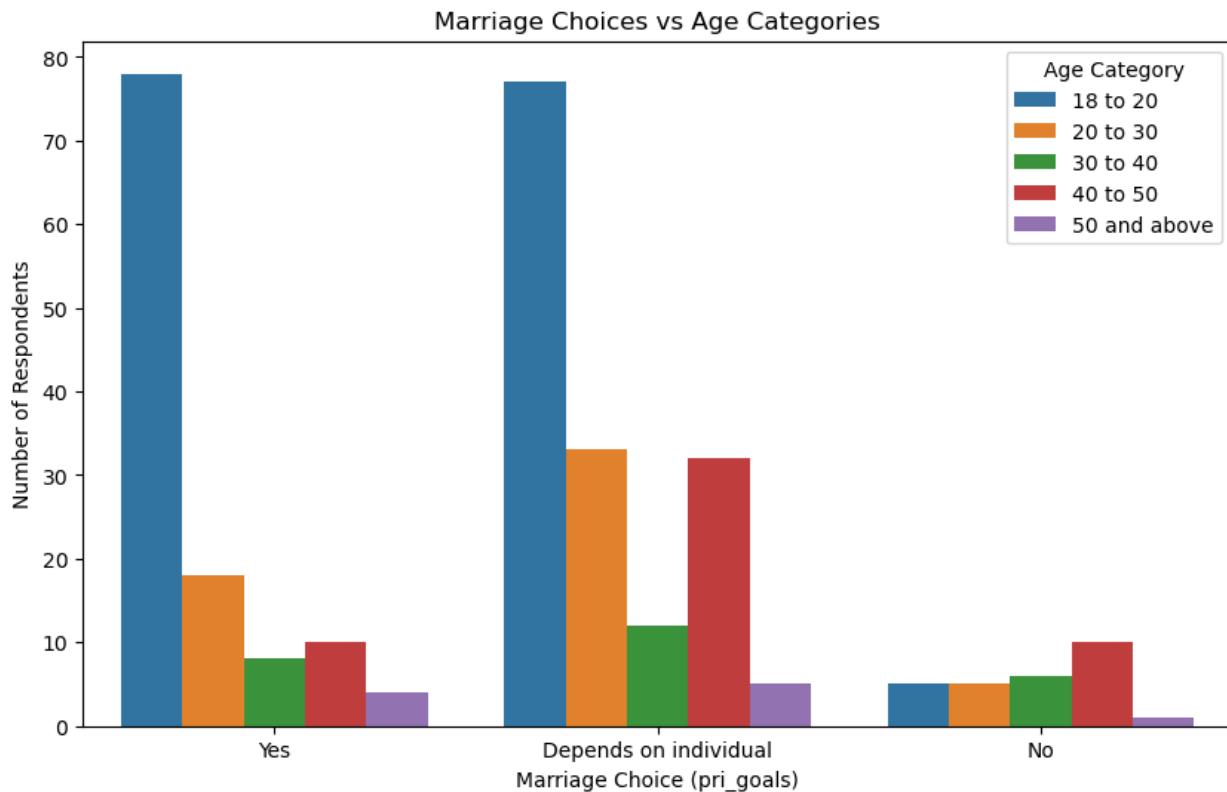
sns.countplot(
    data=df,
    x="pri_goals",
    hue="age_cat"    # separate bars for each age category
)

```

```

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
})

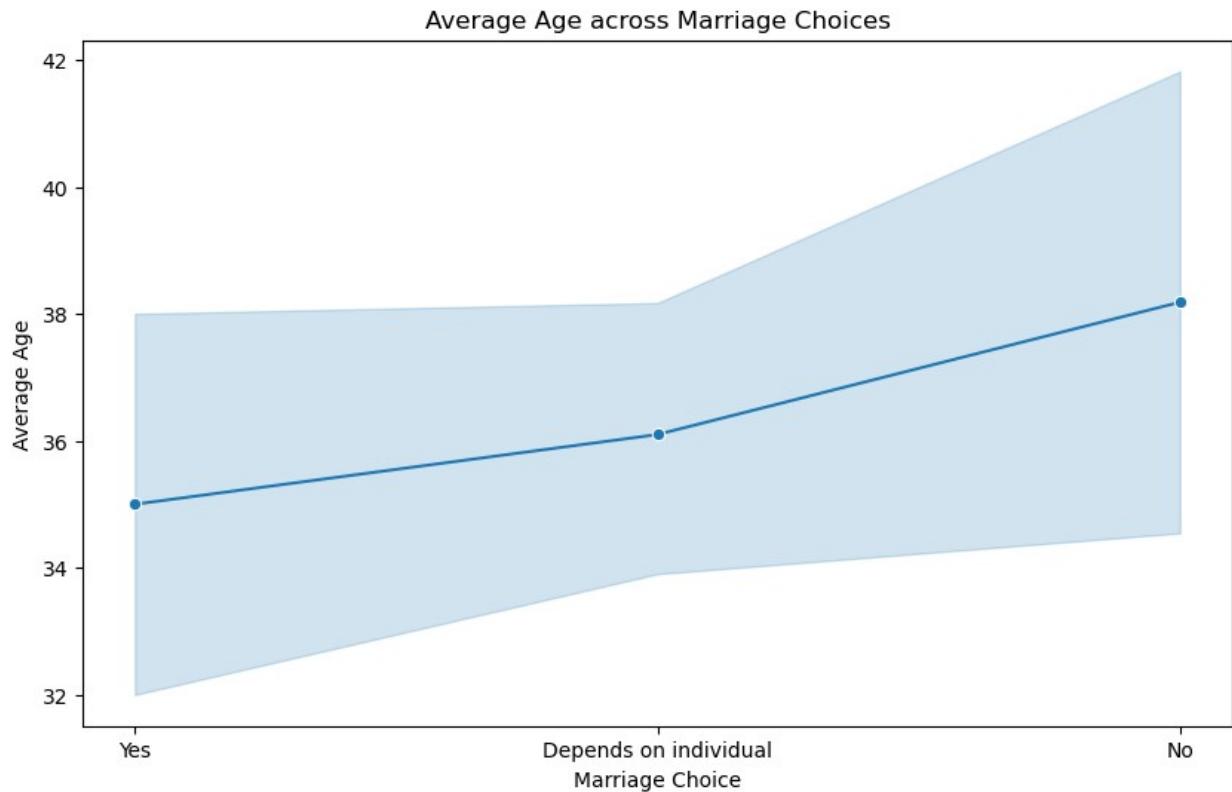
plt.figure(figsize=(10,6))

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_chldn',
'prep_chldn',
```

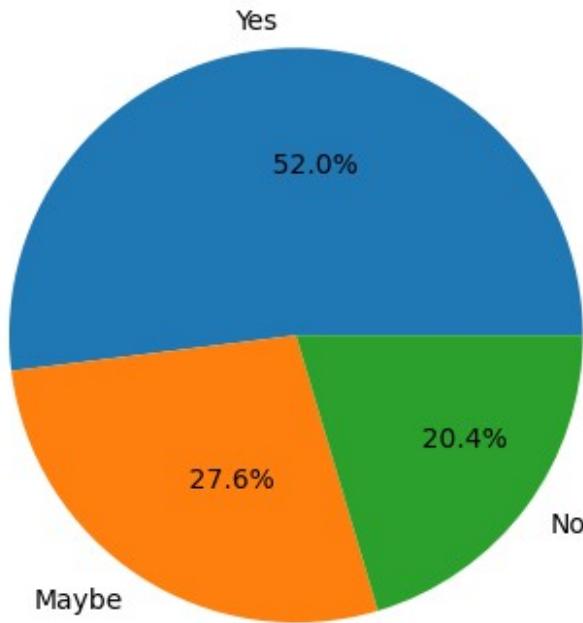
```
'prenup',
'fin_freedome',
'sup_debt',
'm_concerns ',
'm_consider',
'cost_wed',
'Pfin_share',
'j_property',
'[I believe marriage should be postponed until both partners are financially stable.]',
'[I feel pressure from society to get married.]',
[Financial compatibility is more important than romantic 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.]",
'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='%.1f%%'
)
plt.title("Debt Status Distribution")
plt.show()
```

Debt Status Distribution



#### 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()

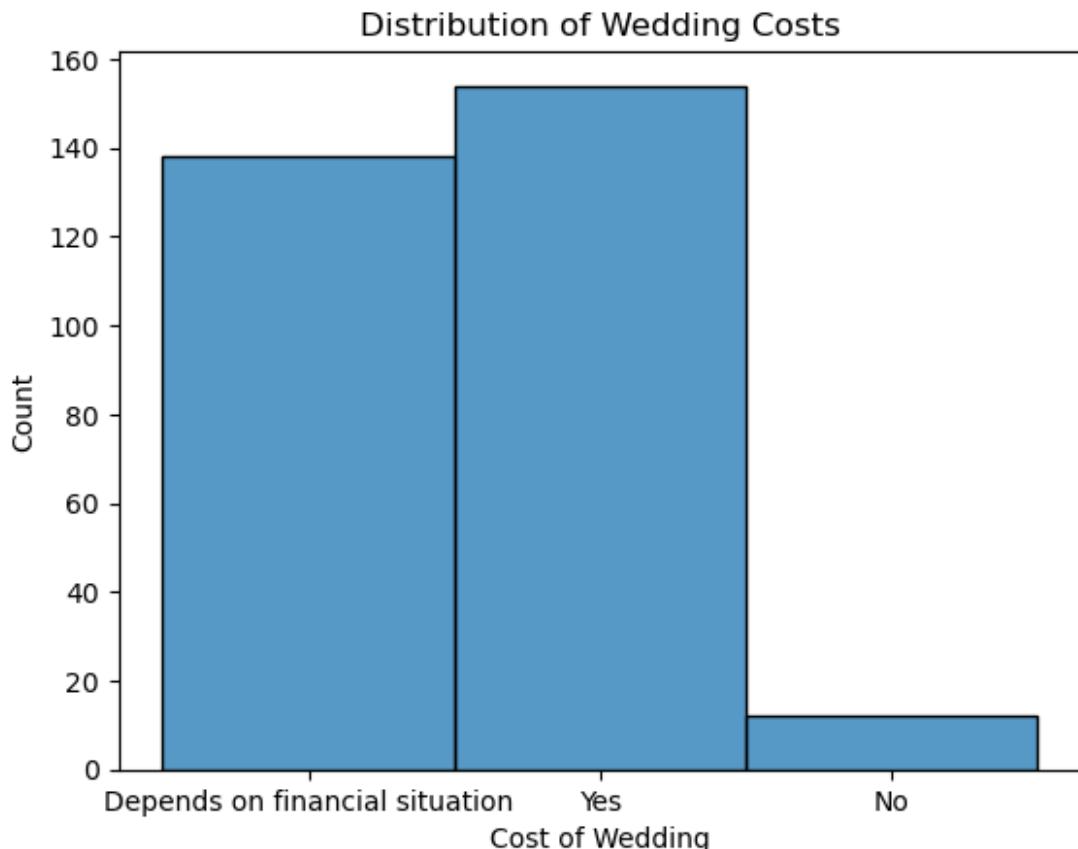
```



```

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.