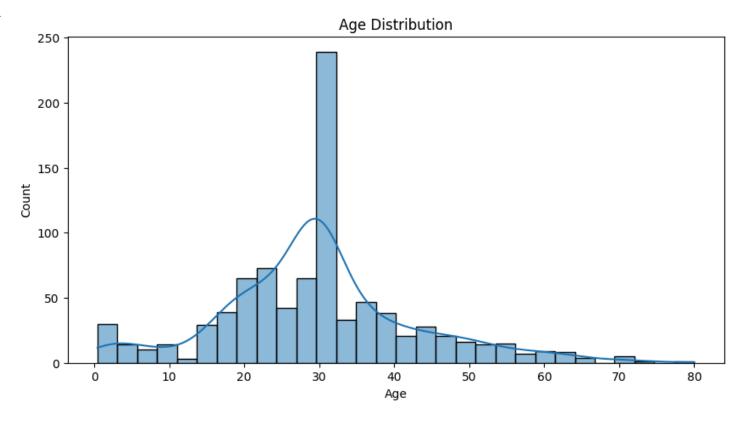
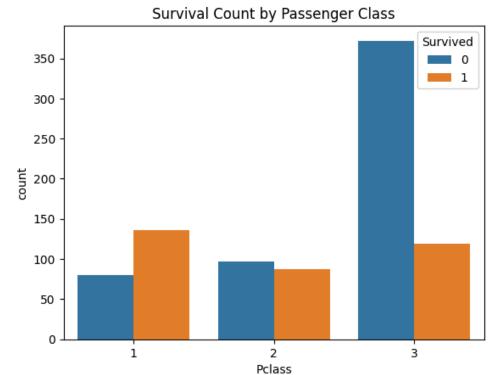
```
from google.colab import files
uploaded = files.upload()
      Choose Files Titanic-Dataset.csv
     • Titanic-Dataset.csv(text/csv) - 61194 bytes, last modified: 7/26/2025 - 100% done
     Saving Titanic-Dataset.csv to Titanic-Dataset.csv
import pandas as pd
df = pd.read_csv('Titanic-Dataset.csv')
df.head()
      Show hidden output
              Generate code with df
                                     View recommended plots
                                                                  New interactive sheet
 Next steps:
df.info()
      Show hidden output
df.isnull().sum()
      Show hidden output
df.drop('Cabin', axis=1, inplace=True)
df['Age'].fillna(df['Age'].mean(), inplace=True)
                                        <> Empty cell X
    /tmp/ipython-input-11-122601397
                                                                                                                 ar or Ories through chained assignmen
                                                                                                                   ☐ o × nich we are setting values alw
     The behavior will change in pan
                                           What can I help you build?
     For example, when doing 'df[col)......
                                                                                                   value,, implace=True)' or df[col] = df[col].method(v
```





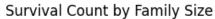
sns.countplot(x='Sex', hue='Survived', data=df)
plt.title('Survival Count by Gender')
plt.show()

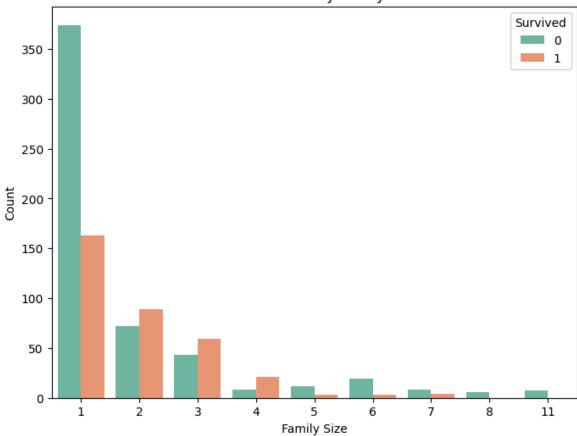




```
plt.figure(figsize=(10, 6))
numeric_df = df.select_dtypes(include=['number'])
sns.heatmap(numeric_df.corr(), annot=True, cmap='Blues')
plt.title('Correlation Heatmap')
plt.show()
```







```
df['IsAlone'] = 0
df.loc[df['FamilySize'] == 1, 'IsAlone'] = 1

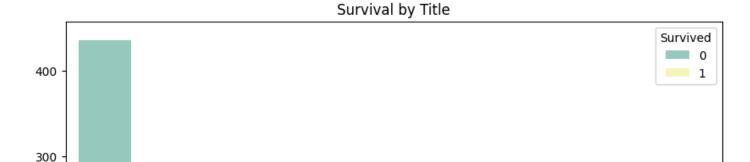
sns.countplot(x='IsAlone', hue='Survived', data=df, palette='Set1')
plt.title('Survival by Alone or Not')
plt.xticks([0, 1], ['With Family', 'Alone'])
plt.ylabel('Count')
plt.show()
```



count

200

100



? Key Conclusions from the Titanic Dataset Analysis:

• The overall survival rate was approximately 38%.

Mr

- Females had a significantly higher chance of survival compared to males.
- Passengers in 1st class had a higher survival rate than those in 2nd and 3rd class.

Mrs

- Younger passengers, especially children, were more likely to survive.
- Passengers who had family members aboard (siblings, spouses, parents, or children) had slightly higher chances of survival.

Miss

Title

Master

Rare

• The higher the fare, the more likely the passenger was to survive, indicating that wealth had an influence.