jupyter Untitled18 Last Checkpoint: 17 minutes ago

File Edit View Run Kernel Settings Help

Trusted

Code

JupyterLab Python 3 (ipykernel)

[1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
```

[3]:
```
df = pd.read_csv("C:/Users/RAMCHARAN/Downloads/train.csv")
```

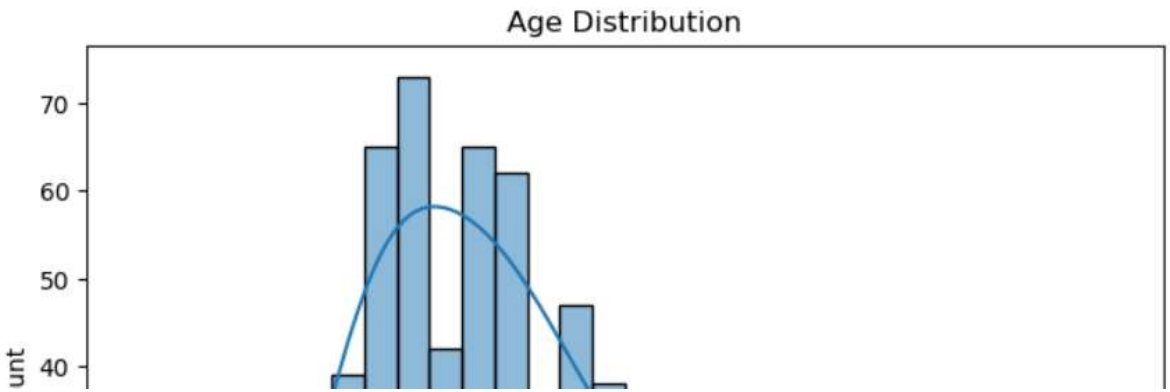
[4]:
```
df.head()
df.info()
df.describe()
df.isnull().sum()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 891 entries, 0 to 890
Data columns (total 12 columns):
 #   Column       Non-Null Count  Dtype
---  ------       --------------  -----
 0   PassengerId  891 non-null    int64
 1   Survived     891 non-null    int64
 2   Pclass       891 non-null    int64
 3   Name         891 non-null    object
 4   Sex          891 non-null    object
 5   Age          714 non-null    float64
 6   SibSp        891 non-null    int64
 7   Parch        891 non-null    int64
 8   Ticket       891 non-null    object
 9   Fare         891 non-null    float64
 10  Cabin        204 non-null    object
 11  Embarked     889 non-null    object
dtypes: float64(2), int64(5), object(5)
```

```
 9   Fare         891 non-null    float64
 10  Cabin        204 non-null    object
 11  Embarked     889 non-null    object
dtypes: float64(2), int64(5), object(5)
memory usage: 83.7+ KB
```

[4]:
```
PassengerId      0
Survived         0
Pclass           0
Name             0
Sex              0
Age            177
SibSp            0
Parch            0
Ticket           0
Fare             0
Cabin          687
Embarked         2
dtype: int64
```

[5]:
```
plt.figure(figsize=(8,5))
sns.histplot(df['Age'].dropna(), kde=True, bins=30)
plt.title('Age Distribution')
plt.show()
```



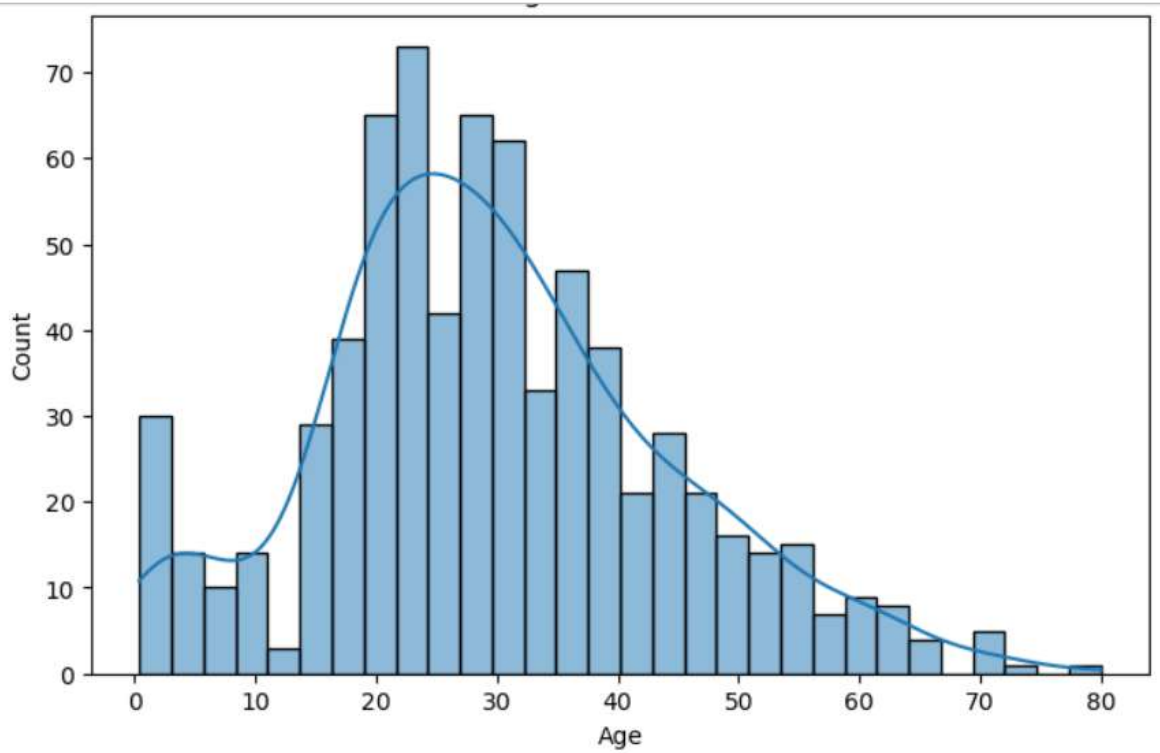
jupyter Untitled18 Last Checkpoint: 17 minutes ago

File Edit View Run Kernel Settings Help

Trusted

Code

JupyterLab Python 3 (ipykernel)



[6]:
```
sns.countplot(x='Survived', data=df)
plt.title('Survival Counts')
plt.show()
```

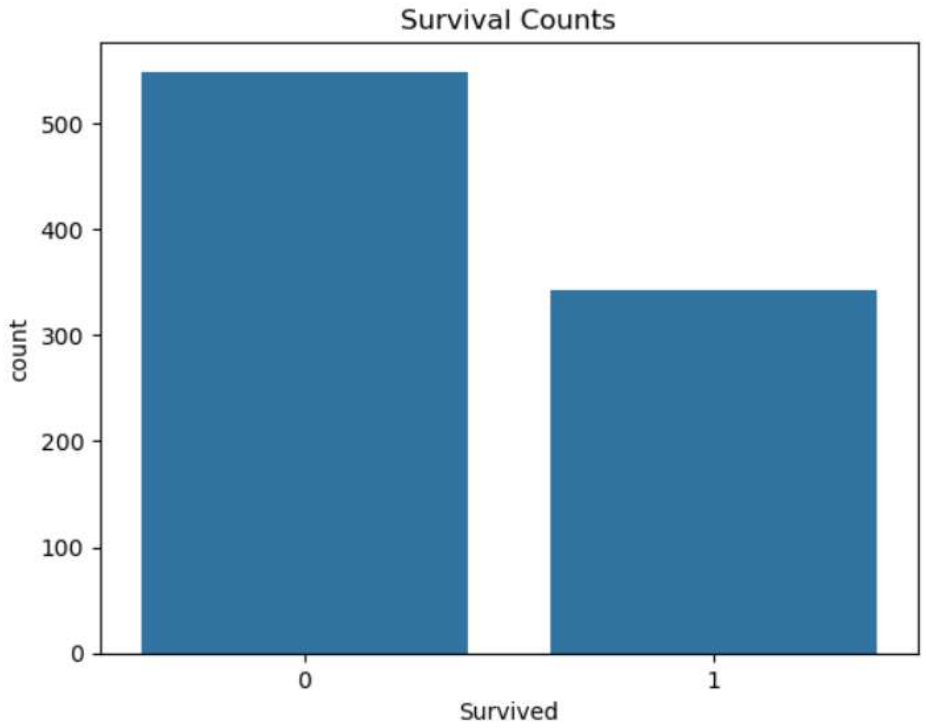
jupyter Untitled18 Last Checkpoint: 17 minutes ago

File Edit View Run Kernel Settings Help

Trusted

Code

JupyterLab Python 3 (ipykernel)



[7]:
```
sns.boxplot(x='Survived', y='Age', data=df)
plt.title('Age vs Survival')
plt.show()
```

jupyter Untitled18 Last Checkpoint: 17 minutes ago

File Edit View Run Kernel Settings Help

Trusted

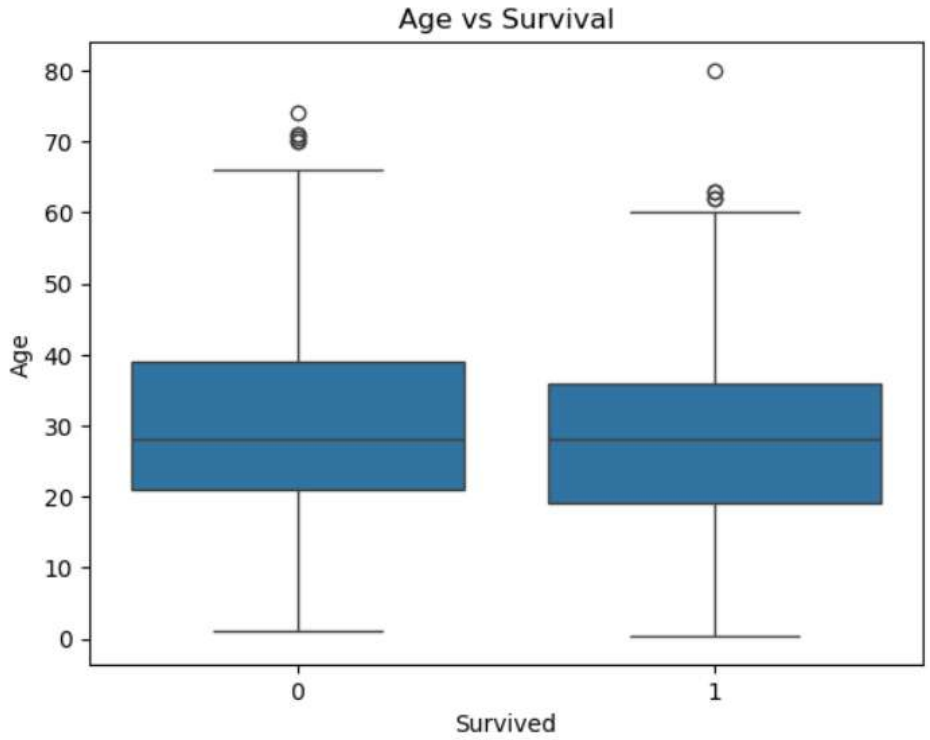
Code

JupyterLab

Python 3 (ipykernel)

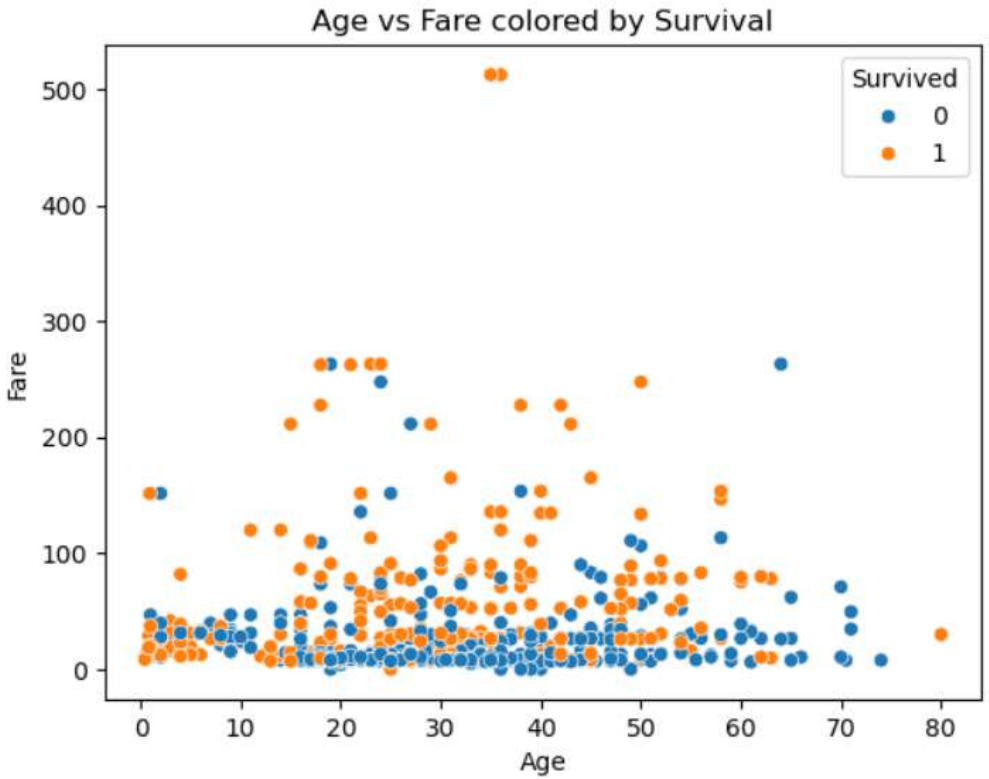
Paste this cell from the clipboard (V)

[7]:
```
sns.boxplot(x='Survived', y='Age', data=df)
plt.title('Age vs Survival')
plt.show()
```



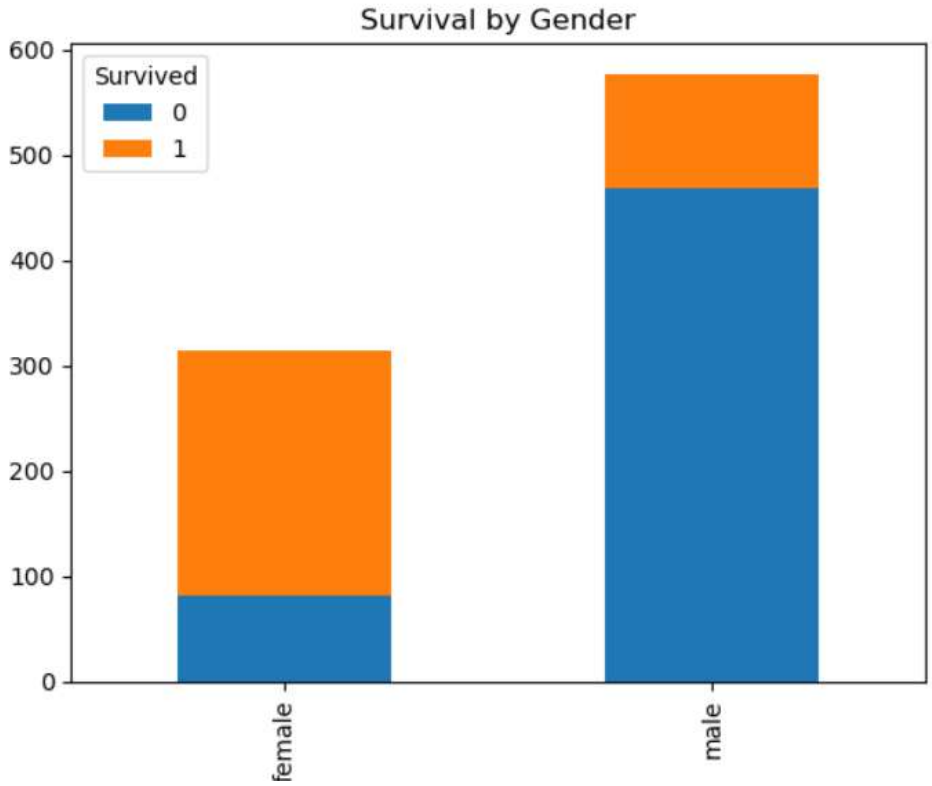
[8]:
```
sns.scatterplot(x='Age', y='Fare', hue='Survived', data=df)
plt.title('Age vs Fare colored by Survival')
plt.show()
```

[8]:
```
sns.scatterplot(x='Age', y='Fare', hue='Survived', data=df)
plt.title('Age vs Fare colored by Survival')
plt.show()
```

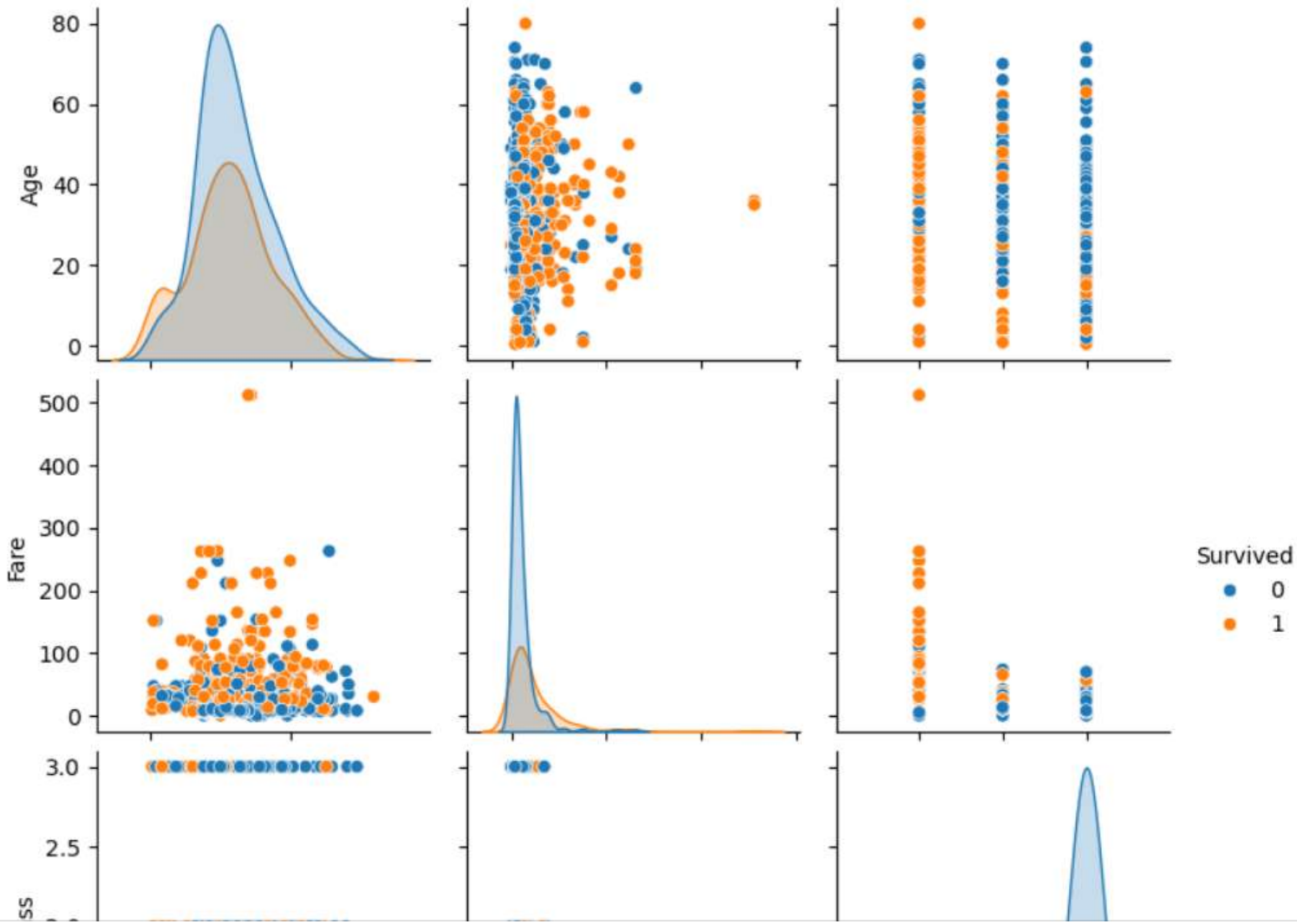


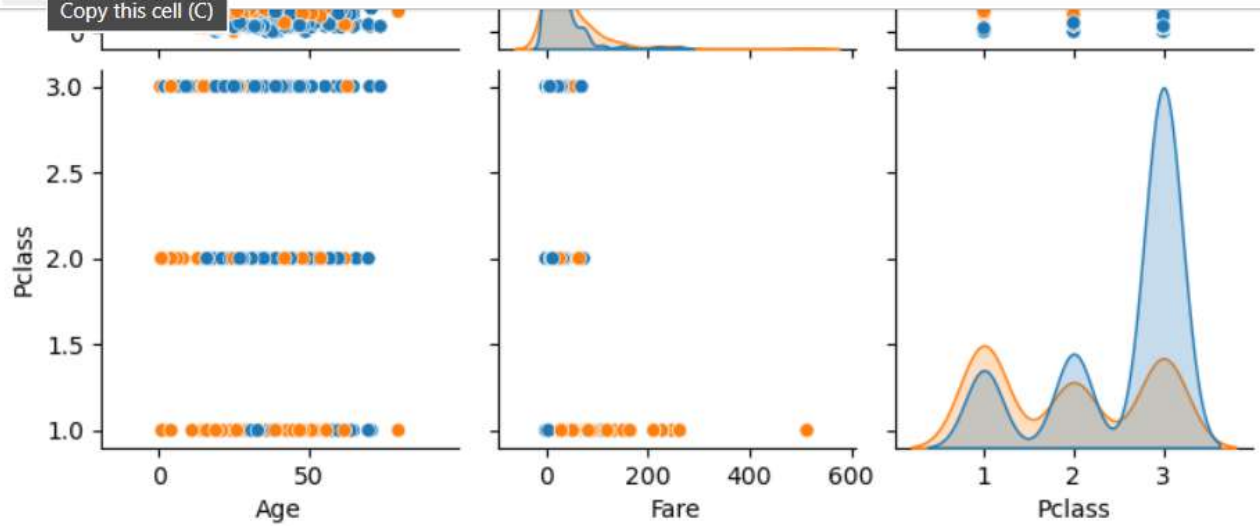
[9]:
```
pd.crosstab(df['Sex'], df['Survived']).plot(kind='bar', stacked=True)
plt.title('Survival by Gender')
plt.show()
```

[9]:
```
pd.crosstab(df['Sex'], df['Survived']).plot(kind='bar', stacked=True)
plt.title('Survival by Gender')
plt.show()
```

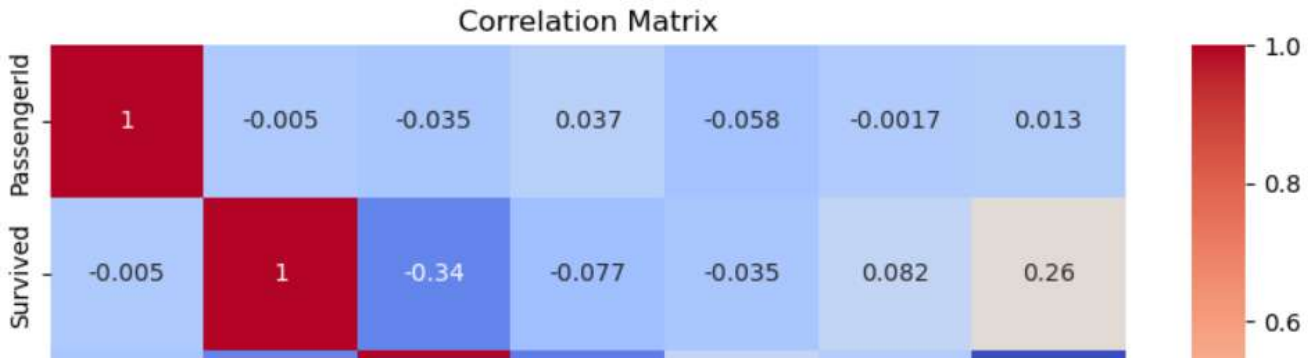


[10]:
```
sns.pairplot(df[['Age', 'Fare', 'Survived', 'Pclass']], hue='Survived')
plt.show()
```





[12]:
```
plt.figure(figsize=(10,8))
sns.heatmap(df.select_dtypes(include=['number']).corr(), annot=True, cmap='coolwarm')
plt.title('Correlation Matrix')
plt.show()
```



File Edit View Run Kernel Settings Help Trusted

Code JupyterLab Python 3 (ipykernel)

[14]:
```
plt.figure(figsize=(10,8))
sns.heatmap(df.select_dtypes(include=['number']).corr(), annot=True, cmap='coolwarm')
plt.title('Correlation Matrix')
plt.show()
```