In [4]:

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


data_path = "C:/Users/91988/Downloads/titanic dataset.csv"
try:
    titanic_data = pd.read_csv(data_path)
except Exception as e:
    print(f"Error loading the dataset: {e}")


print("First few rows of the dataset:")
print(titanic_data.head())


print("\nColumn names in the dataset:")
print(titanic_data.columns)


categorical_variable = 'sex'

# Count plot for the categorical variable (Gender distribution)
plt.figure(figsize=(10, 6))
sns.countplot(x=categorical_variable, data=titanic_data)
plt.title('Distribution of Gender on the Titanic')
plt.xlabel('Gender')
plt.ylabel('Count')
plt.xticks(rotation=45)
plt.show()


continuous_variable = 'age'

# Histogram for the continuous variable (Age distribution)
plt.figure(figsize=(10, 6))
sns.histplot(titanic_data[continuous_variable].dropna(), bins=30, kde=True)
plt.title('Distribution of Ages on the Titanic')
plt.xlabel('Age')
plt.ylabel('Density')
plt.show()
```

```
Error loading the dataset: [Errno 2] No such file or directory: 'C:/Users/919
88/Downloads/titanic dataset.csv'
First few rows of the dataset:
   pclass  survived                                                name     sex
\
0       1         1                        Allen, Miss. Elisabeth Walton  female
1       1         1                        Allison, Master. Hudson Trevor    male
2       1         0                         Allison, Miss. Helen Loraine  female
3       1         0              Allison, Mr. Hudson Joshua Creighton      male
4       1         0  Allison, Mrs. Hudson J C (Bessie Waldo Daniels)  female

       age  sibsp  parch  ticket      fare     cabin embarked boat    body  \
0  29.00      0      0   24160  211.3375        B5        S    2     NaN
1   0.92      1      2  113781  151.5500  C22 C26        S   11     NaN
2   2.00      1      2  113781  151.5500  C22 C26        S  NaN     NaN
3  30.00      1      2  113781  151.5500  C22 C26        S  NaN   135.0
4  25.00      1      2  113781  151.5500  C22 C26        S  NaN     NaN

                      home.dest
0                   St Louis, MO
1  Montreal, PQ / Chesterville, ON
2  Montreal, PQ / Chesterville, ON
3  Montreal, PQ / Chesterville, ON
4  Montreal, PQ / Chesterville, ON

Column names in the dataset:
Index(['pclass', 'survived', 'name', 'sex', 'age', 'sibsp', 'parch', 'ticke
t',
       'fare', 'cabin', 'embarked', 'boat', 'body', 'home.dest'],
      dtype='object')
```
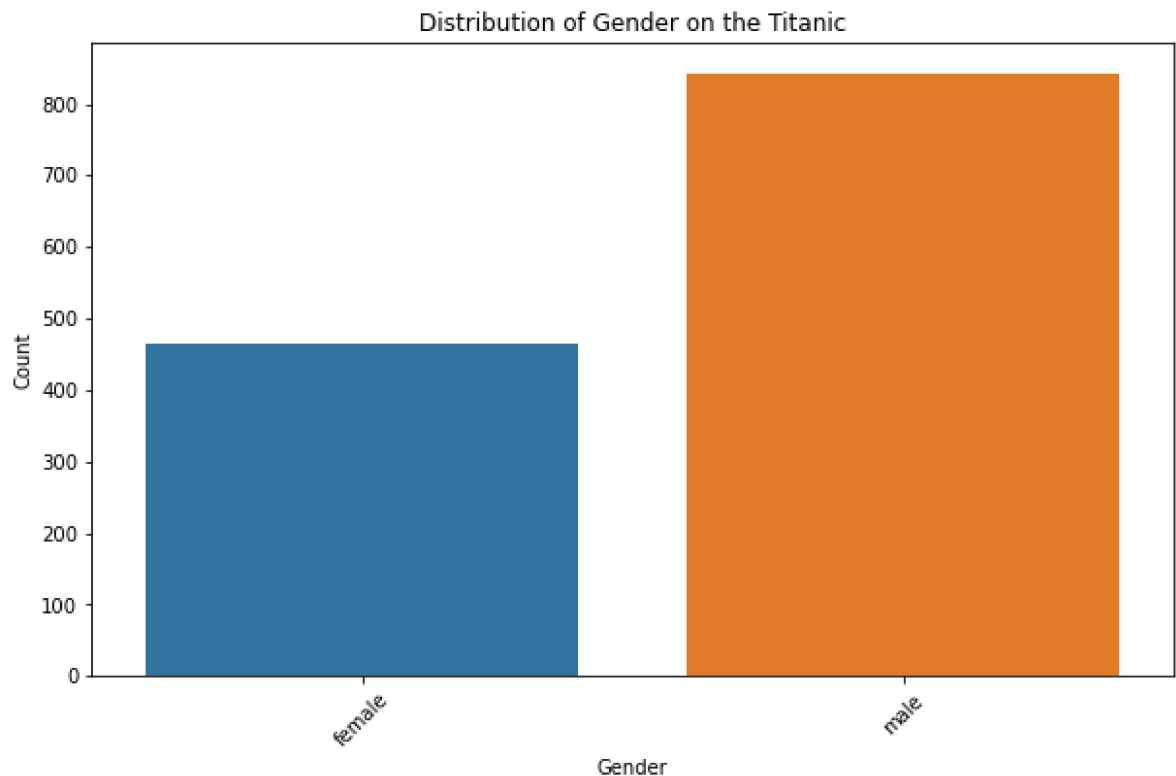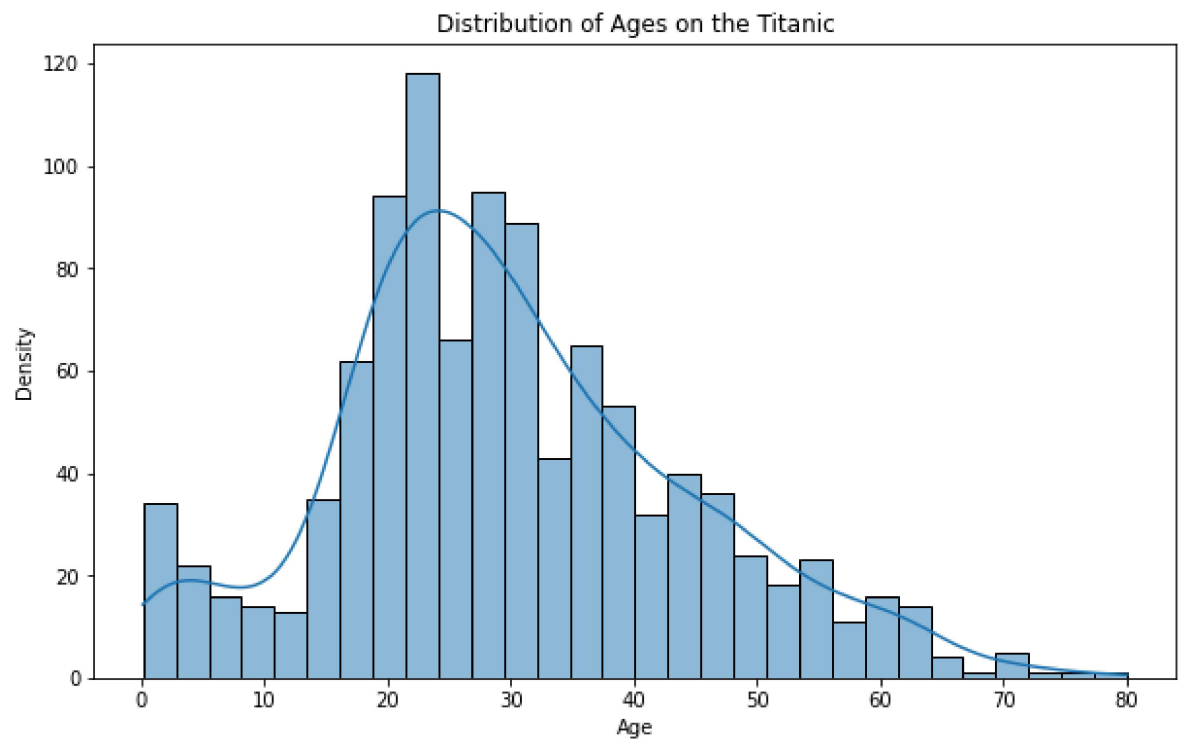
Distribution of Gender on the Titanic

Distribution of Ages on the Titanic

In [ ]: