In [1]:
```
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
```

In [2]:
```
data = pd.read_csv('p.csv')
data
```

Out[2]:

	Age	Salary	Purchased
0	34	120000	Yes
1	43	165000	No
2	34	100000	No
3	36	150000	Yes
4	43	135000	No
5	34	170000	No
6	38	135000	No
7	34	210000	Yes
8	34	200000	No
9	40	225000	No
10	41	120000	No
11	34	225000	Yes
12	36	150000	No
13	43	225000	No
14	38	165000	No
15	40	135000	Yes
16	34	210000	No
17	49	225000	No
18	38	150000	No
19	36	225000	No
20	51	100000	Yes
21	52	140000	No

22	40	200000	Yes
23	41	135000	Yes
24	34	170000	No
25	55	165000	No
26	43	140000	Yes
27	38	170000	No
28	34	100000	Yes

In [3]:
```
print("\nData types of the columns:")
print(data.dtypes)
```

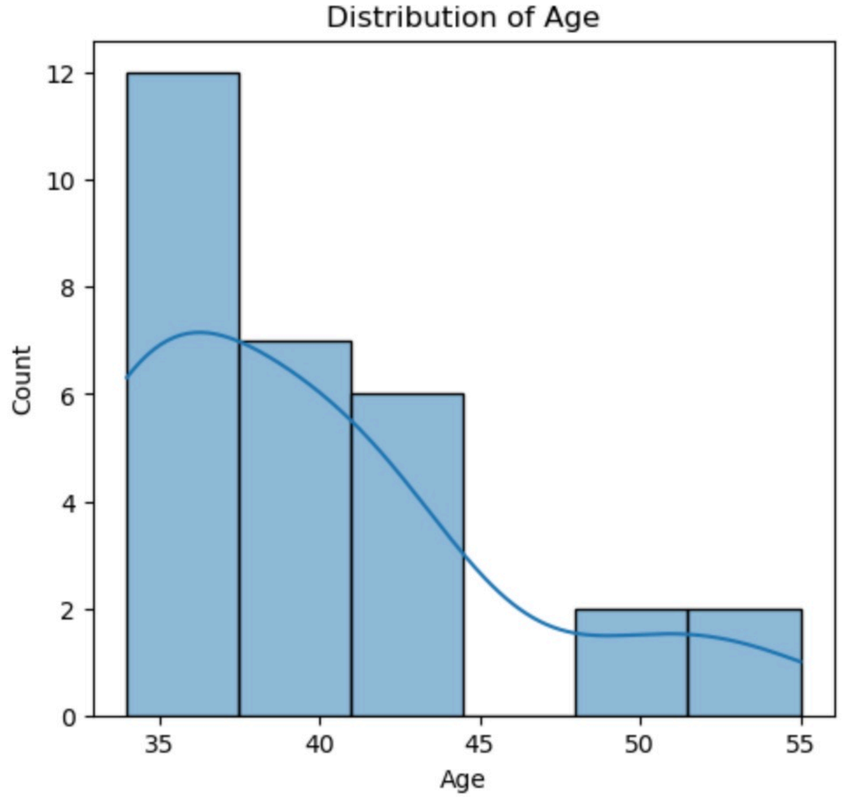
```
Data types of the columns:
Age           int64
Salary        int64
Purchased    object
dtype: object
```

In [4]:
```
data['Purchased'] = data['Purchased'].map({'Yes': 1, 'No': 0})
```

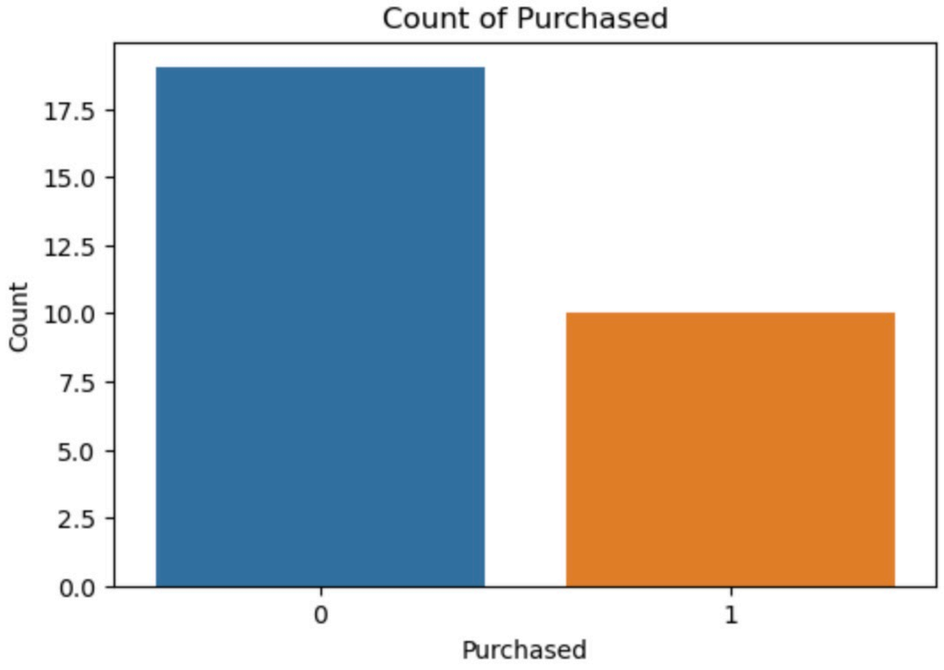
In [6]:
```
plt.figure(figsize=(12, 5))

plt.subplot(1, 2, 1)
sns.histplot(data['Age'], kde=True)
plt.title('Distribution of Age')

plt.subplot(1, 2, 2)
sns.histplot(data['Salary'], kde=True)
plt.title('Distribution of Salary')
plt.show()
```

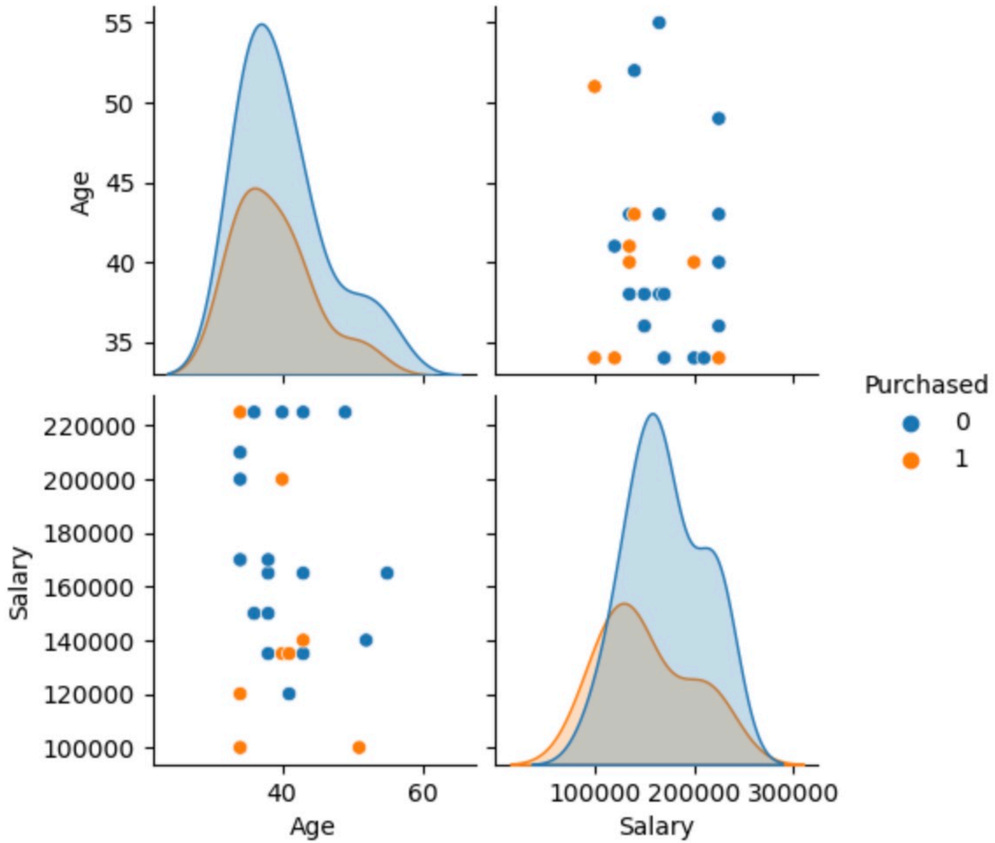


In [7]:
```
plt.figure(figsize=(6, 4))
sns.countplot(x='Purchased', data=data)
plt.title('Count of Purchased')
plt.xlabel('Purchased')
plt.ylabel('Count')
plt.show()
```


Count of Purchased
Count
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
0
1
Purchased

In [8]:
```
sns.pairplot(data, hue='Purchased', vars=['Age', 'Salary'])
plt.show()
```

```
/Users/kakarlarutvik/anaconda3/lib/python3.11/site-packages/seaborn/axisgrid.py:118: UserWarning: The figure layout has changed to tight
  self._figure.tight_layout(*args, **kwargs)
```



In [9]:
```
plt.figure(figsize=(8, 6))
correlation_matrix = data.corr()
sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm')
plt.title('Correlation Matrix')
plt.show()
```