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In [9]: # Import necessary libraries
import pandas as pd
from scipy.stats import ttest_ind
```

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In [10]: # Load data into a Pandas DataFrame
df = pd.read_csv(r"C:\Users\djbro\OneDrive\Desktop\AB Testing\ab_data.csv")
```

```
In [11]: df
```

```
Out[11]:
```

	user_id	timestamp	group	landing_page	converted
0	851104	2017-01-21 22:11:48.556739	control	old_page	0
1	804228	2017-01-12 08:01:45.159739	control	old_page	0
2	661590	2017-01-11 16:55:06.154213	treatment	new_page	0
3	853541	2017-01-08 18:28:03.143765	treatment	new_page	0
4	864975	2017-01-21 01:52:26.210827	control	old_page	1
...
294473	751197	2017-01-03 22:28:38.630509	control	old_page	0
294474	945152	2017-01-12 00:51:57.078372	control	old_page	0
294475	734608	2017-01-22 11:45:03.439544	control	old_page	0
294476	697314	2017-01-15 01:20:28.957438	control	old_page	0
294477	715931	2017-01-16 12:40:24.467417	treatment	new_page	0

294478 rows × 5 columns

```
In [12]: # Select the relevant columns for A/B testing
A = df[df['group'] == 'control']['converted']
B = df[df['group'] == 'treatment']['converted']
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In [13]: A.head()
```

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Out[13]:
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0	0
1	0
4	1
5	0
7	0

Name: converted, dtype: int64

```
In [14]: # Perform the A/B test using the ttest_ind function
t, p = ttest_ind(A, B)
```

```
In [15]: # Print the t-value and p-value
print(f't-value: {t:.3f}, p-value: {p:.3f}')

t-value: 1.237, p-value: 0.216
```

```
In [16]: # Interpret the results
if p < 0.05:
    print('There is a significant difference between the two groups.')
else:
    print('There is no significant difference between the two groups.')
```

There is no significant difference between the two groups.