

# Congratulations! You passed!

Grade received 81.81%

To pass 80% or higher

**Go to next item**

Retake the assignment in **7h 59m**

## Prepared for the Final Project?

Latest Submission Grade 81.81%

1. Which of the following are the purpose of AB testing? (Select all that apply).

**1 / 1 point**

☒ Learn from data

☒ **Correct**

When you are doing an AB test, this is the part where you can learn from your data.

☒ Provide evidence for or disprove a hypothesis

☒ **Correct**

When you are doing an AB test, this is the part where you can learn about your hypothesis.

☐ Clean and label data

2. Which of the following are necessary components of a user-level test assignment table? (Select all that apply).

**1 / 1 point**

☒ The user\_id

☒ **Correct**

Exactly! We'll need this selected thing to move forward along with other information.

☒ A test name or number

☒ **Correct**

Exactly! We'll need this selected thing to move forward along with other information.

☒ The date or time of assignment

☒ **Correct**

Exactly! We'll need this selected thing to move forward along with other information.

☐ The user's email address

☒ The assignment (treatment or control?)

☒ **Correct**

Exactly! We'll need this selected thing to move forward along with other information.

3. Which of the following are necessary components of an item-level test assignment table? (Select all that apply).

0 / 1 point

☒ The user\_id

☒ **This should not be selected**

Please revisit the videos on: **Test Assignments** and refer back to the reading **Some Thoughts for the Final Assignment**.

☐ The item category

☒ A test name or number

☒ **Correct**

Exactly! We'll need all of this selected thing to move forward.

☒ The item id

☒ **Correct**

Exactly! We'll need all of this selected thing to move forward.

☐ The date or time of assignment

☒ The assignment (treatment or control?)

☒ **Correct**

Exactly! We'll need all of this selected thing to move forward.

4. In the final project we'll be doing AB testing at an item level. Check out the table `final_assignment_qa`. What other pieces of data will you need to compute the 30-day order binary. (Select all that apply).

**1 / 1 point**

*Please note: 30-day order binary means show a 1 if the item was ordered at any point the 30 day period after treatment, and 0 if the item was never ordered.*

☐ The users table

☐ The item category

☒ The orders table

☒ **Correct**

Exactly! You will need this information for your assignment.

☐ The user\_id

☒ I'm still missing something

☒ **Correct**

Exactly! The thing we are still missing is the date of the assignment.

5. Use this [AB testing calculator](#). Enter the numbers seen in the image, and use the results to determine if the results are statistically significant.

**1 / 1 point**

**ABBA**  
A/B testing statistics

Label	Number of successes	Number of trials	
Control	100	1000	<a href="#">Remove</a>
Treatment	101	1000	<a href="#">Remove</a>

Interval confidence level:  
0.95

Use multiple testing correction: ☒

[Compute](#) [Add another group](#)

Are the results statistically significant?

☒ No

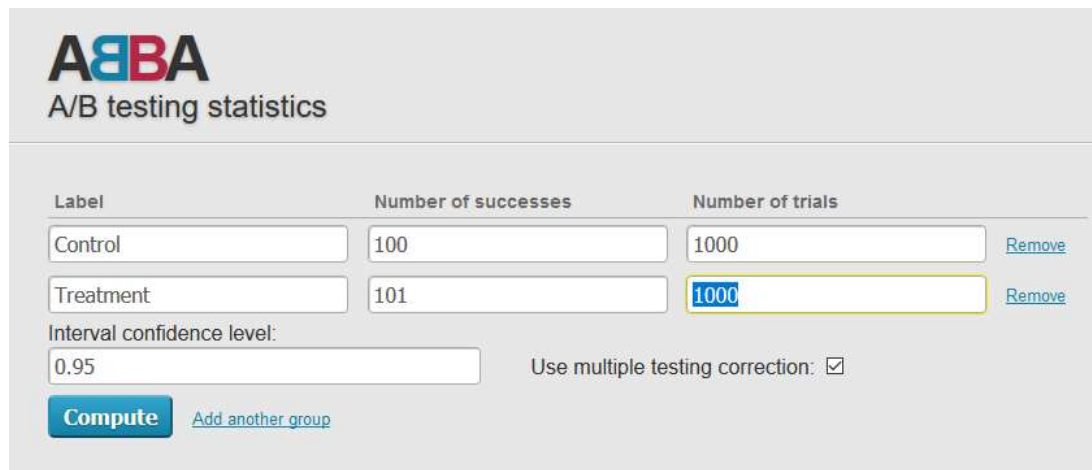
☐ Yes

☒ **Correct**

The p-value is 0.97 and the true mean is likely to be between -25% and 27%.  
This result is not statistically significant.

6. Use this [AB testing calculator](#). Enter the numbers seen in the image, and select all the correct interpretations of the data.

**0 / 1 point**



The image shows the ABBA A/B testing statistics calculator interface. It has a header with the ABBA logo and the text 'A/B testing statistics'. Below the header, there are three columns: 'Label', 'Number of successes', and 'Number of trials'. The 'Control' group has 100 successes and 1000 trials. The 'Treatment' group has 101 successes and 1000 trials. The 'Number of trials' for the Treatment group is highlighted with a yellow border. Below these columns, there is a field for 'Interval confidence level' set to 0.95 and a checkbox for 'Use multiple testing correction' which is checked. At the bottom, there is a 'Compute' button and a link 'Add another group'.

Label	Number of successes	Number of trials
Control	100	1000
Treatment	101	1000

Interval confidence level: 0.95

Use multiple testing correction: ☒

[Compute](#) [Add another group](#)

☒ We have not collected enough samples to be able to detect statistically significant lift of 1%

☒ **Correct**

This is a correct interpretation of the data.

☒ The treatment caused a 1% lift in the success metric

☒ **This should not be selected**

Please revisit the lesson: **Statistics Refresher (Optional)**.

☐ There is no detectable change in this metric

☐ The treatment caused a lift of as much as 27% in the success metric

7. Use this [AB testing calculator](#). Enter the numbers seen in the image. In this calculation, what is the observed success rate in control?

**1 / 1 point**

**ABBA**  
A/B testing statistics

Label	Number of successes	Number of trials	
Control	216	2549	<a href="#">Remove</a>
Treatment	324	2371	<a href="#">Remove</a>

Interval confidence level:

Use multiple testing correction: ☒

[Compute](#) [Add another group](#)

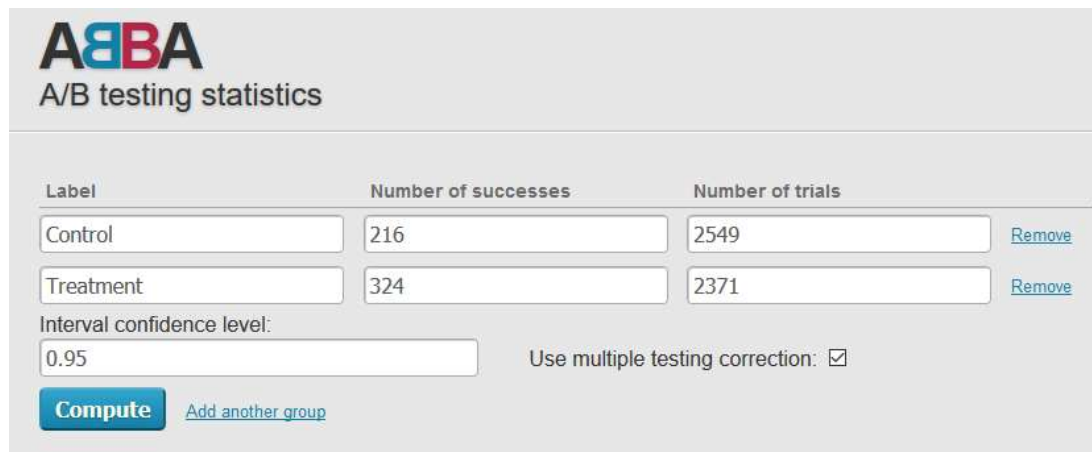
- ☐ 61%
- ☐ 40% to 81%
- ☒ 8.5%
- ☐ 12% to 15%
- ☐ 14%
- ☐ 7.5% to 9.6%

☒ **Correct**

This is the observed success rate in control.

8. Use this [AB testing calculator](#). Enter the numbers seen in the image. In this calculation, what is the observed success rate in treatment?

**1 / 1 point**



The screenshot shows the ABBA A/B testing statistics calculator. It has a table with two rows: Control and Treatment. The Control row has 216 successes and 2549 trials. The Treatment row has 324 successes and 2371 trials. Below the table, the interval confidence level is set to 0.95, and the 'Use multiple testing correction' checkbox is checked. There is a 'Compute' button and a link to 'Add another group'.

Label	Number of successes	Number of trials	
Control	216	2549	<a href="#">Remove</a>
Treatment	324	2371	<a href="#">Remove</a>

Interval confidence level:

Use multiple testing correction: ☒

[Compute](#) [Add another group](#)

☐ 12% to 15%

☒ 14%

☐ 61%

☐ 8.5%

☐ 7.5% to 9.6%

☐ 40% to 81%

☒ **Correct**

This is the observed success rate in treatment.

9. Use this [AB testing calculator](#). Enter the numbers seen in the image. In this calculation, what is the observed relative lift in success rate between control and treatment?

**1 / 1 point**

**ABBA**  
A/B testing statistics

Label	Number of successes	Number of trials	
Control	216	2549	<a href="#">Remove</a>
Treatment	324	2371	<a href="#">Remove</a>

Interval confidence level:

Use multiple testing correction: ☒

[Compute](#) [Add another group](#)

- ☒ 61%
- ☐ 8.5%
- ☐ 14%
- ☐ 40% to 81%
- ☐ 12% to 15%
- ☐ 7.5% to 9.6%

☒ **Correct**

This is the observed relative lift in success rate between control and treatment.

**10.** Use this [AB testing calculator](#). Enter the numbers seen in the image. In this calculation, what is the range of improvement that is likely to have been caused by the treatment?

**1 / 1 point**



**ABBA**  
A/B testing statistics

Label	Number of successes	Number of trials	
Control	216	2549	<a href="#">Remove</a>
Treatment	324	2371	<a href="#">Remove</a>

Interval confidence level:

Use multiple testing correction: ☒

[Compute](#) [Add another group](#)

☐ 12% to 15%

☐ 7.5% to 9.6%

☒ 40% to 81%

☐ 8.5%

☐ 61%

☐ 14%

☒ **Correct**

The observed improvement is 61%, and we can say with 95% confidence that the underlying lift is somewhere between 40% and 81%.

**11.** Which of the following queries would meet the coding standards for the final project?

**1 / 1 point**

☐ SELECT

COUNT(\*)

FROM dsv1069.users

☒ SELECT

COUNT(\*) AS user\_count

FROM dsv1069.users

☒ **Correct**

It is important to write a descriptive label for any new columns.