AB Test

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Your company is running a test that is designed to compare two different versions of the company's website.

Version A of the website is shown to 60% of users, while version B of the website is shown to the remaining 40%. The test shows that 8% of users who are presented with version A sign up for the company's services, as compared to 4% of users who are presented with version B.

If a user signs up for the company's services, what is the probability that she/he was presented with version A of the website?

75 **%**

Submit

Your score is 100%, perfect!

Competition is fun! Especially when you know you'll win. :)

Challenge friends to match your score

Use this question for your test (/sign-up?SignUpType=FromQuestion&QuestionId=41456)

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Tags

GENERAL DATA SCIENCE () BAYES' THEOREM () PROBABILITY () PUBLIC () NEW ()

Difficulty: Easy

Duration: 7min

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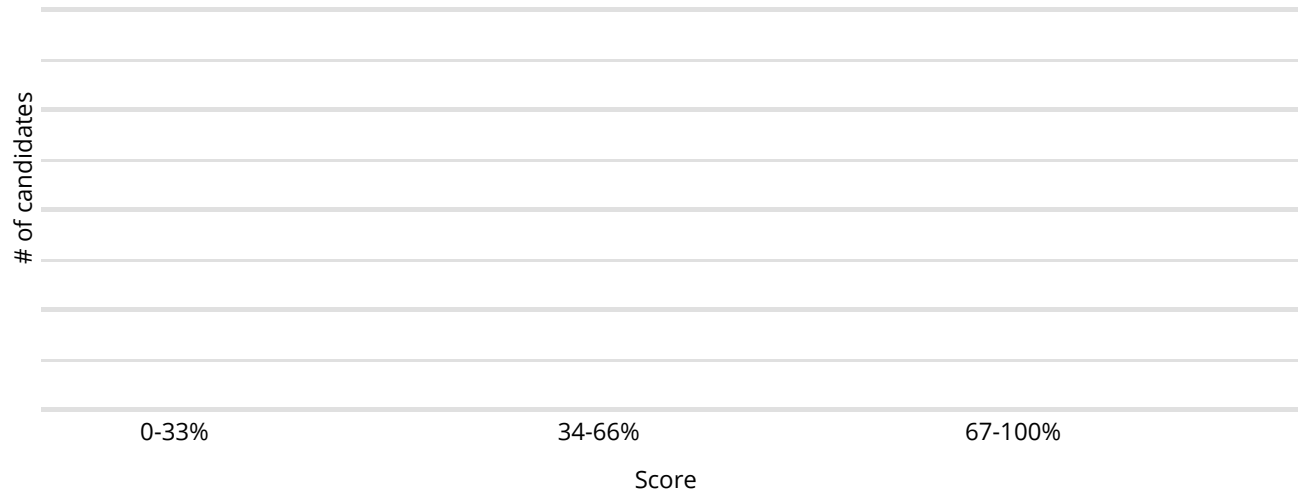
Score Distribution



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Would you like to see our tests? The following tests contain General Data Science related questions:

Data Science Test (/tests/data-science-test/65)

General and Python Data Science, and SQL Online Test (/tests/data-science-sql-online-test/117)

General and Python Data Science, Python, and SQL Online Test (/tests/general-python-data-science-python-sql-online-test/140)

General Data Science and SQL Online Test (/tests/general-data-science-sql-online-test/141)

On the TestDome Blog

(https://blog.testdome.com/screening-applicants-good-bad-ugly/)

Screening Applicants: The Good, the Bad and the Ugly (https://blog.testdome.com/screening-applicants-good-bad-ugly/)

Since we're all biased and we use incorrect proxies, why not just outsource hiring to experts or recruitment agencies? After all, they've been screening people for many years, so they must know how to do it right?

Not really. I was surprised to discover that many experts disagree with each other. Everybody praises their pet method and criticizes the others. Many of these methods look legitimate, but are based on...

Read more (https://blog.testdome.com/screening-applicants-good-bad-ugly/)

Let total Number of users = 500

No. people shown Version A (V_A) = 0.60 × 500 =
= 300

No. people shown Version B (V_B) = 0.40 × 500
= 200

No. people who sign up version A (S_A) = 0.08 × 300
= 24

No. people who sign up version B (S_B) = 0.04 × 200
= 8

$P(V_A \mid S) = ?$

total people sign up (S) = 32

Bayesian,

$$P(V_A \mid S) = \frac{P(S \mid V_A) \cdot P(V_A)}{P(S)}$$

$$= \frac{24}{300} \times \frac{300}{500} \times \frac{500}{32} = 0.75$$