

Technical Assessment

Senior Software Engineer

Take home task
1.5 hours



We're excited to invite you to the next stage in the recruitment process!

Data engineers play a key role in ensuring Adaptavist can scale and ensure our development teams are supported in delivering workloads whilst conforming to best practices.

This interview assessment will be a take-home task that we would like you to complete, send back, and be ready to discuss at your final interview.

Task 1

1.1 Word Count

Implement a solution that takes a file and prints a word count of its contents. The output should consist of a line for each word, with the number of its occurrences in the file. It should be sorted by the number of occurrences starting with the most frequent word. Ensure the validation of the output is automated as part of your solution.

You have the freedom to determine the technology and approach.

Example input

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Non sodales neque sodales ut. Gravida arcu ac tortor dignissim convallis aenean et tortor. Ultricies mi eget mauris pharetra et ultrices neque. Vel eros donec ac odio tempor orci.

Tellus in metus vulputate eu scelerisque felis. Volutpat diam ut venenatis tellus in metus vulputate eu. Tempor id eu nisl nunc mi ipsum faucibus vitae. Sit amet luctus venenatis lectus magna fringilla urna. Habitant morbi tristique senectus et netus et. Eget felis eget nunc lobortis. Neque vitae tempus quam pellentesque nec.

Pellentesque nec nam aliquam sem et tortor consequat id porta. Eget dolor morbi non arcu risus quis. Lacinia quis vel eros donec. Velit laoreet id donec ultrices tincidunt arcu non sodales. Feugiat in fermentum posuere urna nec tincidunt. Tortor at risus viverra adipiscing at. In mollis nunc sed id semper. Semper eget duis at tellus at urna condimentum mattis pellentesque. Egestas purus viverra accumsan in nisl nisi scelerisque eu. A cras semper auctor neque vitae tempus quam pellentesque.

Example output

foo: 24
bar: 17
...

Skills Assessment

- Solutioning
- Development
- Planning

1.2 Face to face follow up questions

As part of the face to face interview, we will discuss your approach to the task and its implementation, and discuss how you would handle change to the requirements.

Skills Assessment

Dealing with unexpected change
Handling on-the-spot questions from Engineers and/or customers

Task 2

2.1 Prepare to discuss a previous project

As part of the face to face interview, we would like to discuss a previous project you've worked on. This should ideally be an infrastructure project, including some diagram of the infrastructure and how data flows through it. We will ask probing questions about the solution to get an understanding of your thinking and decision-making behind the design whilst also enquiring about any improvements you would have liked to make.

Please note that we do not expect to see a perfect solution, we understand that any implementation is impacted by other forces (such as time and organisational constraints). We are more interested in how you came up with the solution given the requirements, and your ability to implement it.

Skills Assessment

- Management of human resources and deliverables
- System Design
- Collaboration

Please be ready to discuss your task at your interview with the team, the interview will also have additional competency-based questions. If you have any questions please contact me and I will be happy to help!

Good luck!