**Coding Assessment**

Hi [Candidate Name], we’d like to invite you to complete a coding assessment as part of the hiring process. The assignment is relevant to the job role you are applying for, and it is meant to assess your skills. Keep in mind that there are no ‘right answers.’ This assignment is designed to gauge your skills and give us an idea of how you approach tasks/issues. Please send this over to us up to **five days** after receiving this email.

After the **five days**, you will be invited to a 60-minute interview The interview will be divided into three parts.

**Coding Assessment solution walk-through (40 minutes)**

The goal of this session is to give you a chance to walk us through your solution to the problem and lay out the reasons for your approach.

**Past Problem Example (15 minutes)**

We’d like you to share an example of a problem you have solved or a Process you have improved - make sure you follow the STAR method, giving all the details needed and being very data-driven.

**Answering your questions (5 minutes)**

Take this chance to ask any questions you may have about working at Jaguar Land Rover

**Background**

The Chassis Dyno Test team has compiled all test data that have been run for the past week across all test cells into a table in an SQL database. The engineering team is looking to review the compiled data and extract relevant information to ensure they make a data-driven decision for their current design. However, an issue was raised by the stakeholder group stating that none of the engineers have experience with extracting data using an SQL Query language, hence, they are not able to pull the data they need.

**Objectives**

To build a simple application/tool with a graphical user interface (GUI) for users to be able to interact, extract and filter data from the table based on their condition.

**Example Filter Condition**

* Provide a list of tests done by Vehicle G and Vehicle A
* Provide a list of Driver Names that drove in Cell 7
* Provide a list of tests with Drive Trace EU02 and US01
* Provide a list of tests where IWR is between 1.5 and 3.5
* Provide a list of tests where TotalCOgkm is less than 2.2 and TotalCO2gkm is greater than 150.

**Notes**

* Treat the CSV file containing the compiled data as your data source.
* The task will be mainly assessed based on the functionality and the design of the tool.
* You are free to use whichever programming language to develop the tool.