*It’s a standard part of Lionhead’s recruitment process to issue a test to job applicants. This three-question test is issued to Data Scientist applicants by Lionhead’s business team.*

*This test is designed to help us understand your quantitative analysis skillset, your perspective on industry objectives and your approach to solving challenges around game titles. Your methodology is as important as what your answer turns out to be.*

*At this point I also want to offer you the option to reach out to the test’s creator with any enquiries or comments (preferably regarding the test, please) that you may have.*

*I’m reachable at* [*a-johear@microsoft.com*](mailto:a-johear@microsoft.com)*.*

*Good luck!*

**Question One**

The following dataset (Dataset 1) has been collated by your studio business team to allow the studio to better understand title purchase and gameplay trends. You have been asked to take this dataset and compile a one-page report for the entire studio’s benefit.

1a. At a summary level, please describe the *form* and *content* of this report.

1b. Please describe how you would go about creating this report. Valuable detail would include tools used, techniques used, intended functionality and how the information would be conveyed.

1c. Please create a demonstration version of one element within this report. Please also provide any materials used to generate that element.

1d. Assuming a long-term commitment to a report of the form you specified above, are there any changes would you make over time?

**Question Two**

Game teams at your studio have identified that monitoring how long players continue to play your most recent title is an area of particular interest. The studio is looking to you for guidance on how to manage information around this critical issue.

2a. What recommendations would you give to the Business Manager as regards player engagement monitoring?

2b. What information does Dataset 1 contain which may be useful in regards to tracking long-term player engagement?

2c. Using Dataset 1, create an initial assessment of long-term player engagement challenges, issues and key data points. Please also provide a brief description of the techniques used.

2d. At a high level, assess the utility of your initial assessment.

**Question Three**

Your studio’s leadership team has requested that you utilise a set of “Superdata” (Dataset 2) to generate revenue predictions for an early title concept; the title in question being an FPS game with CCG and MOBA elements, planned for release on console, tablet and PC. Even an approximate prediction will enable the leadership team to make an informed decision regarding subsequent investment into the concept.

3a. Generate an initial 18-month revenue prediction for this title. Please provide a description of your methodology and any relevant materials.

3b. Would you make any comments or observations regarding your revenue prediction?