

## Back End – The Portal Test

### The Application (the Portal Test)

The application we ask you to build allows us to see a sample of code, it gives us a feel for your coding skills and how you think.

We call building this application 'The Portal Test', named affectionately after the road our head office is located on.

The application can be solved quite simply, but this is your opportunity to showcase your skills and demonstrate a variety of language features and best practices as a professional software engineer.

### Requirements

When writing your application, you should create a small command-line utility to help streamline the picking process for a fictional department within our company.

It should be written in Node.js or Go (GoLang).

Given a CSV input file with 3 columns:

```
product_code  
quantity  
pick_location
```

Find the optimal route through the warehouse. There are 52 bays in the warehouse lettered from A to AZ, each bay has 10 shelves for stock numbered from 1 to 10 (1 being lowest shelf, 10 being highest). For the purpose of this test the warehouse racking is in a long straight line and the items need to be picked in ascending order, i.e. starting at bay A and finishing at bay AZ, each of the items should be picked from lowest to highest shelf (1-10).

### Format of the Application

The output of the utility should be a CSV file, containing the sorted products for the pick run. The CSV file should be formatted in the same way as the input file with the same column headers. The file should only contain a single row per product with quantities summed.

### Submitting your application

We ask that candidates submit their test back to either their recruiter or contact at Home Bargains within one week of receiving the test. If you feel that you are not able to keep to this timescale for whatever reason, please contact us as soon as reasonably practical to

discuss this. Once completed, you should include your surname and the date of submission in the following format: surname-yyyyymmdd.zip. e.g. Bloggs-20230901.zip

Although we endeavour to review your submission as quickly as possible, there may be times when we take a little longer to respond to you. Generally, we aim to respond to you within 1 week of submission.