Question 1 - General - Easy

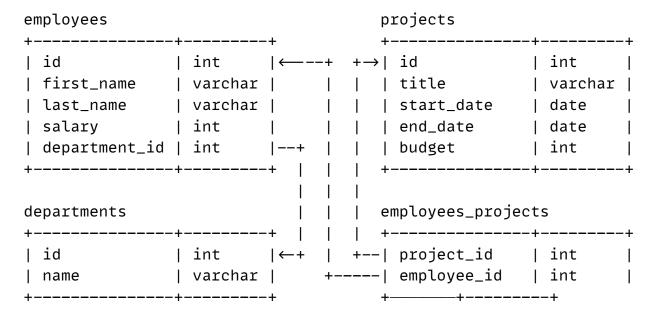This is a CSV file containing household income data parsed from the 2010 Census:

```
FIPS,HOUSEHOLD_SIZE,INCOME
061,3,107656
047,5,78962
061,5,-1
061,5,100810
047,2,-1
061,1,108400
061,4,85320
047,4,51954
061,5,190116
061,1,76084
061,2,-1
061,1,76502
```

The first column is the FIPS code, which uniquely identifies a geographic area. You may notice "-1" listed as the income for some rows. This means the household did not report their income to the census taker. We want to find the average income of households in Manhattan (New York County, code 061). Missing data can be ignored, but we want to calculate what percent of data was missing. Write code, in the language of your choice, to calculate and display this information. The CSV can be inputted from either a string or a file.

Question 2 - SQL - Easy

Given the following schemas, write a SQL query to return the total project budget for each employee ID. In other words, the sum of the budgets of all projects an employee is associated with. The result should be sorted by the highest total budget to the lowest total budget.

```
employees                              projects
+---------------+---------+            +---------------+---------+
| id            | int     |←---+   +→| id            | int     |
| first_name    | varchar |    |   | | title         | varchar |
| last_name     | varchar |    |   | | start_date    | date    |
| salary        | int     |    |   | | end_date      | date    |
| department_id | int     |--+ |   | | budget        | int     |
+---------------+---------+  | |   | +---------------+---------+
                             | |   |
departments                  | |   | employees_projects
+---------------+---------+  | |   | +---------------+---------+
| id            | int     |←+ |   +--| project_id    | int     |
| name          | varchar |    +-----| employee_id   | int     |
+---------------+---------+          +---------------+---------+
```

Question 3 - Frontend Easy

We have an HTTP endpoint that adds a new post to a user's page. Sometimes the user clicks multiple times and sends multiple requests to the endpoint. What do we call an endpoint that ensures the post is only added one time?

Question 4 - JS Easy

You are given an array, but you don't know the length. Write a program to find a target element in the array. If we try to access an index that is out of bounds, undefined will be returned.

```
Input: arr = [-15, -5, 3, 5 ,12, 15, 36], target = -5
Output: 1
```

Question 5 - JS Medium

Implement the function sayIt with the expected behaviour:

```
sayIt('my')('name', 'is')('jonathan')() === 'my name is jonathan'
```

where both the input and the chain can be of varying length. The final empty call will terminate the chain and return the result.