# CloudxLab Written Test

#### Instructions:

- 1. Please solve below problems and send the answers in email to <a href="mailto:reachus@cloudxlab.com">reachus@cloudxlab.com</a> with the subject "CloudxLab Written Test: Solutions"
- 2. Attached the solutions in the email with proper file extension so that we can compile and run it.
- 3. Please make sure that your that your code is getting compiled and running properly else we will not take your application forward.

## Problem 1:

Given an array X and a number y, find the contiguous subarray of smallest length whose sum is greater than y. Note that array X contains only the positive numbers

#### Example

Test 1 - X = [9, 18, 42, 98], y = 21

Output subarray can be either [42] or [98]

Test 2 - X = [9, 18, 2, 4, 5], y = 21

Output subarray of smallest length is [9, 18]

## Problem 2:

You are given a CSV file **employees.csv** as shown below. In this file, the managerid column refers to the id of the employee who is a manager. So, the manager is also an employee. For example Ramesh is the manager of Dinesh in the CSV file given below.

employees.csv

### ld, name, managerid

- 1, Dinesh, 2
- 2, Ramesh, 4
- 3, Sandeep, 4
- 4, Abhishek, NULL

You have to read this csv file and create a tree like structure in which parent node is the manager of the child node. You can use "\t" tab for indentation or showing the hierarchy.

## Output for the above file -

```
Abhishek - 4
Ramesh - 2
Dinesh - 1
Sandeep - 3
```

Please comment your code properly so that we can understand your approach.