You may choose to solve 1 of the 3 problems from below. You need to submit the project source code for the same before scheduled interview.

A. Reconciliation

==========

You have 2 files:

- an XML file:

```
<items>
      <item id="?">
            <name>some name</name>
            <data>some data</data>
      </item>
...
</items>
```

- a CSV file with 3 fields:
  id,ref,cleared;
  id is an integer,
  ref is a comma-free string
  cleared is true or false;

Write a java program that reconciliates the data in files by id and prints out:

- cleared items (ids in csv with cleared true)
- not cleared items (ids in csv with cleared false)
- unexpected clearance (ids in CSV but not in XML)
- absent clearance (ids in XML but not in CSV)

B. Search webapp

==========

Write a webapp that search items in a catalog and display the result of the search:

- search "submit" must be issue a POST request
- the result page must be "refresh proof", i.e. POST data should not be submitted again and the result should be same as original

You may store the catalog items in-memory.

C. Shortest Path between 2 points

==========

Write a java program to find the shortest path from point A to point B in a maze.

Maze:

- The maze is represented by a 2-dimensional array of 1's and 0's
- 0 represent that user can traverse a path
- 1 represents that user cannot traverse path
- User can move only horizontal and vertical

Input: PointA, PointB, Maze Details

Output: Shortest Path

Sample Input:

PointA = 0,1

PointB = 2,3

Number of Rows in Maze = 5

```
Number of Columns in Maze = 5
Maze Co-ordinates = 1 0 1 1 1
                    1 0 1 0 0
                    1 0 0 0 1
                    1 0 1 1 1
                    0 1 1 1 1
```

1	0	1	1	1
1	0	1	0	0
1	0	0	0	1
1	0	1	1	1
0	1	1	1	1

Sample Output (Shortest Path):

1,0; 1,1; 1,2; 2,2; 2,3