# ALEX CODING CHALLENGE SOLUTION

Solved by,

Name: Neha Maske

Mobile number: 0424412626

Email id: [nedzmaske@gmail.com](mailto:nedzmaske@gmail.com)

Respected HR team, Infocentric/Alex Solutions,

Thank you for the coding challenge. Please find the solution below.

The two csv files given courses and prerequisites helped a lot to solve the challenge. Basically What I have understood from the problem statement is, I am supposed to write a program to develop a small software that will help people register for course (no frontend) with respect to the course prerequisites completion.

Tool used: Eclipse Oxygen edition’

Language used: Java

Output displayed on console.

Front-end : NA

Step 1: I have imported csv files into java program and displayed the course structure and prerequisites to user,

Step 2: Java collection methods used here is Hashmap (key,value).

Step 3: By understanding the prerequisites file I have drafted a possible order of how the courses can be completed.

For example , course id : 2 prerequisites are (1,6,11) stored into collection.

Then I have traversed each element from this collection

This way the final list after ID 2 is 1, 6,7,10,12,8,11,2.

Step 4: Now the next key in the map is selected that is 3.

Tis keeps on repeating until final array or collection of possible order is done.

The final order is: 1, 6,7,10,12,8,11,2,3

Now courses such as 4,5,9 cannot be completed as they are repeating in a circle.

Thank you.