**DAILY ONLINE ACTIVITIES SUMMARY**

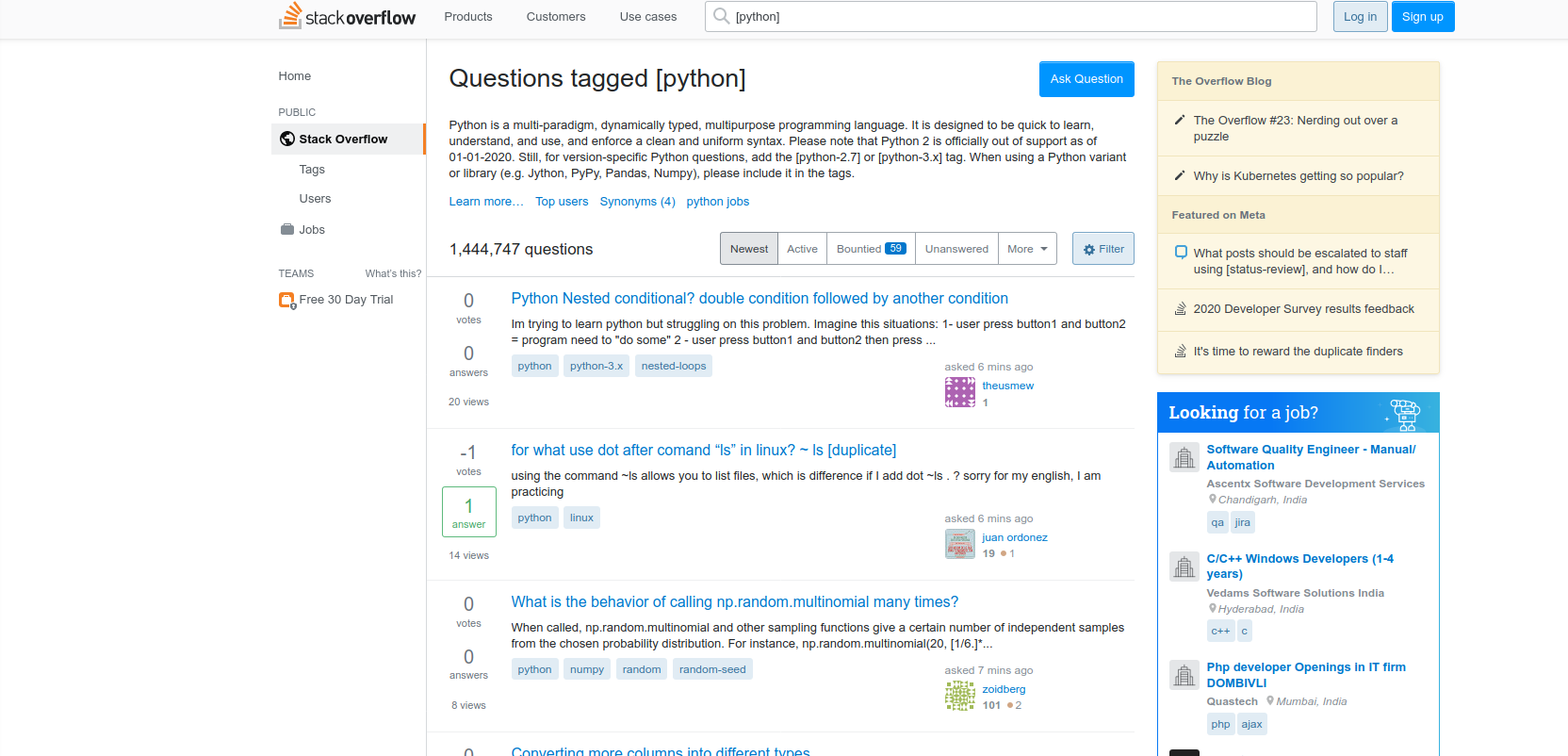
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| **Date:** | **29 may 2020** | | | | | **Name:** | **SPOORTHYVV** | |
| **Sem & Sec** | **4th Sem B Sec** | | | | | **USN:** | **4AL18CS087** | |
| **Online Test Summary** | | | | | | | | |
| **Subject** | | **Operating systems** | | | | | | |
| **Max. Marks** | | **30** | | **Score** | | | **26** | |
| **Certification Course Summary** | | | | | | | | |
| **Course** | **Python-MachineLearning** | | | | | | | |
| **Certificate Provider** | | | **GreatLearning** | | **Duration** | | | **5 hrs** |
| **Coding Challenges** | | | | | | | | |
| **Problem Statement:** [Write a Java program to Find size of the largest ‘+’ formed by all ones in a binary matrix](https://github.com/orgs/alvas-education-foundation/teams/2nd-year/discussions/86) | | | | | | | | |
| **Status:executed** | | | | | | | | |
| **Uploaded the report in Github** | | | | | **yes** | | | |
| **If yes Repository name** | | | | | lockdown\_coding | | | |
| **Uploaded the report in slack** | | | | | **yes** | | | |

Online Test Details: test had been conducted from 9:00 to 9:45 am dated 29 may 2020 .The test included MCQ kind of questions .

Certification Course Details: Python for beginers is the certification course which I have choose to complete during this lock down period .

Python beign one of the most important language for the programmimg world .

I have been solving these through stack overflow.

Coding Challenges Details: Everyday we are given with new question of coding related to the language of java and c. it seems interesting how we imbibe ourself in depth to understand the logic ,break it and then code for it.

Today’s question was : [Write a Java program to Find size of the largest ‘+’ formed by all ones in a binary matrix](https://github.com/orgs/alvas-education-foundation/teams/2nd-year/discussions/86).

And the hint provided is: The idea is to maintain four auxiliary matrices left[][], right[][], top[][], bottom[][] to store consecutive 1’s in every direction. For each cell (i, j) in the input matrix, we store below information in these four matrices –

left(i, j) stores maximum number of  
consecutive 1's to the left of cell (i, j)  
including cell (i, j).

right(i, j) stores maximum number of  
consecutive 1's to the right of cell (i, j)  
including cell (i, j).

top(i, j) stores maximum number of  
consecutive 1's at top of cell (i, j)  
including cell (i, j).

bottom(i, j) stores maximum number of  
consecutive 1's at bottom of cell (i, j)  
including cell (i, j).  
After computing value for each cell of above matrices, the largest + would be formed by a cell of input matrix that has maximum value by considering minimum of (left(i, j), right(i, j), top(i, j), bottom(i, j) )

**The above code has been posted in my github repository**