

Revolutionizing SME Credit

**Zouk Co-Hack Hackathon Problem Statement**

**Difficulty Level: Easy**

1. Scrap the following links:
   1. <http://www.dciindia.org.in/CouncilMember.aspx>
   2. <http://www.indiannursingcouncil.org/pdf/snrc-State-Nursing-Registration-Council.pdf>
   3. <http://www.cicuindia.org/members_directory>
   4. <http://www.cicuindia.org/office_beares>
   5. <http://cimml.in/members-list.html>
   6. <http://www.fastenerindia.org/functions.php?fuse=6>
   7. <http://www.lmtma.org/Member/index_0.html>
   8. <http://www.ssia.co.in/members-s-30.html>
   9. <http://www.cmaindia.org/index.php?rid=12>
   10. <http://www.idma-assn.org/pdf/membership-statewise.pdf>
   11. <http://tematelecom.in/membership_profile_members.html>
   12. <http://www.elcomaindia.com/directory/member-listing>
   13. <http://aipima.org/aipima/list-of-members>
   14. <http://www.i-cema.in/membership-directory.html>
   15. <http://www.indianpumps.org.in/organisation/office-bearers.html>
   16. <http://www.indianpumps.org.in/membership/search-members.html>
   17. <http://www.irmra.org/membership/members_list.htm>
   18. <http://www.maharashtradirectory.com/industrialresources/manufacturers-associations-mumbai.htm>
   19. <http://www.nstedb.com/institutional/tbi-center.htm>
   20. <http://ipfindia.org/MembersDirectory.aspx>
   21. <http://www.siamindia.com/members.aspx?mpgid=1&pgidtrail=4>
   22. <http://www.aifmp.com/?page_id=44>
   23. <http://ieia.in/members/list-members/associate>
   24. [http://www.electronicahitech.com/#](http://www.electronicahitech.com/)
   25. <http://www.dnb.co.in/SMEs/company_listing.asp?q=alphabetical>
   26. <http://isba.in/members/incubatee-member>
   27. <http://smejoinup.com/all-business-services/>
   28. <http://www.ipcaonline.com/members/members-list-a.html>
   29. <http://ipca.org.in/active-members/1/>
   30. <http://www.ipcaindia.org/AllSearch.aspx?SearchString=all>
   31. <http://locator.intel.in/find-reseller/>

**Difficulty Level: Medium**

1. [Puzzle] Using bit-wise operator, check the power of 2.
2. [Puzzle] Make arrangement to cover 8x8 Chessboard using 2x1 Domino, if exteme opposite two bits of chessboard is already covered.
3. [Puzzle] Minimum number of checks required from N-floor with 2 eggs
4. Create general purpose OCR for the given pdf file.
5. Create an underwriting of NeoGrowth Product
6. Extract everything about a company that you can get out of the NowFloats and create some graphs out of it
7. Capture different indices from Zomato and create your own Aggregate score
8. Create an API using nodeJS framework from the two website that helps in retrieving data about a company:
9. <https://www.tofler.in/>
10. <https://www.zauba.com/>

You need to design an API which can extract information about the company (input), out of these two, wherever returns; if both, best amongst the two.

**Difficulty Level: Hard**

1. [Puzzle] You roll a 100 sided die. You will have 2 choices (i) you can cash out and get paid the dollar amount of the roll, or (ii) you can pay $1 to roll the die again. You get the same 2 choices on every roll, and there is no limit to the number of rolls you can make. What is the expected value of the game?
2. [Puzzle] Given a round table, randomly place 3 legs, under the table. What is the probability that the table will fall?
3. [Puzzle] Write an algorithm with O(N)<2N to find 1st two largest number in an list.
4. Create parameters from NBFC point of view and a sample level monte-carlo simulation around monthly income and expense. In case of outlier, calculate the correlation value for the parameter that’s affecting the most.
5. Create Wireframes(psd)/Mobile app for Personal loan application asking person about his different financials numbers along with its admin panel and bank dashboards.
6. Create an mobile document uploader through phone’s camera picture; integrate it with camscanner app and do image processing to fill out values to different financial variables.

**Package offered :** 3 - 12 LPA