

Goldman Sachs interview experience

15th-16th October, 2018

Goldman Sachs came to our college to offer internships to Third Year students, irrespective of branch and pointer. They were offering 75k stipend per month. The company usually seeks to visit as the first company and hence it never came to our college for interns(as Morgan Stanley always visits us first) before this year. In their presentation which happened before the first round, they seemed to be looking for two roles majorly, one related to Mathematics and Analytics(they'll ask you permutation and combination and mathematical puzzles to test you on this) and other Computer Science(core CS subjects would be tested).

Round 1: Online round

4:30 pm-5:30 pm : 15th October, 2018

People from all branches were welcome and there was no pointer restriction for sitting for the online test. It was held on Hackerrank for a duration of one hour which contained 8 MCQs with -2 negative marking and +20 I guess for each correct answer. There was a coding question as well for 35 points. MCQs were based on minimum spanning trees(if Tree 1 and Tree 2 and Tree 3 are joined what would be the new minimum cost), probability(expected number), hash table(complexity of building word ladder and related concepts) and graph. The type of questions were a bit unexpected, but that's how it goes. You can never predict what a kind of questions a company will ask. The single coding question was, given a grid containing addresses of houses such that the addresses were sorted in increasing order from west to east and north to south, find the coordinates(row, column) of a given address(pretty pretty basic, $O(n^2)$ solution was getting accepted but I submitted an $O(n)$ solution)). All branches had the same test. Results were declared at 11 PM at night and 25 people from various branches were shortlisted.

Round 2: Personal Interview 1

10:30 am: 16th October, 2018

My interview began with the standard "Tell me about yourself question". She had printouts of my online test and she asked me how I had solved a particular MCQ(probability one)(This is why try for an optimal approach in the coding round if possible in the coding round, she kept glancing at my code and also read comments which I had written out of habit when solving. Also, always go through the test questions and their possible answers before the interview). I gave an example to explain the same. Then she asked me that probability shouldn't be greater than one, how is the expected value greater than one. I realized she might be trying to confuse me and explained what expected value meant. She seemed satisfied. Then she drew a tree and asked which tree is this(seriously? :P). I said BST. What is the complexity of searching and element in it? Is it balanced? Balance it. She took away the paper when I had halfway balanced the tree seeing that I knew the concept. Then she proceeded with a permutation and combination question to test my analytical skills. Given 7 couples, how can you pick 2 couples such that no two husband and wife are together in a pair? Then she asked me whether I had any questions(Always ask something, it shows that you're interested in them).

Some of my other friends were asked projects in this round, one guy was asked a bit about system calls and computer networks(this was very unexpected to be asked, but again, everything is unpredictable when it comes to interviews), another person was asked about copy constructors, some DSA questions based on DP/Arrays/Hash tables and were told to code the same, people from other branches were asked some puzzles(triangle in a square of 2 units, find a number that when multiplied by 4 and reversed gives the same number, etc). The interviewer was different so each one had their own method of judging.

Round 3: Personal Interview 2

There were some 9-11 of us left I guess



It again began with the standard “Tell me about yourself question”. She, too, had printouts of my online test. She told me to write a class Student such that the operation `obj1 = obj2` on the objects of this class is invalid. I first told her I’ll override the copy constructor’s definition, but she said doing so won’t throw an error, it’ll still accept that line of code. Then I said I’ll put the method in private. She asked another approach. I said I’ll overload the assignment operator and she seemed satisfied. Then she moved to DBMS. Asked me to construct ER diagram for Student Teacher and Subject tables and what would be the primary keys and stuff. Then she asked me to write a query to find the second highest scorer in a particular subject.

Others were asked questions related to their domain in this round. One guy from electronics was asked about gates construction, so I guess they were testing your proficiency in your stream in this round.

Round 4: Personal Interview 3


2-3 people were not accepted after the previous round

This was taken by the Managing Director for everyone and he asked about projects. Drawbacks, flaws, what can be improved, how I implemented a particular module, he asked a lot of questions. Then he asked me if I had any questions for him(Again, *ask something*).

Round 5: Personal Interview 4

This round happened for just one person. I got to know he was asked puzzles and projects. I guess the company was unsure hence held another round to evaluate this candidate.

4 people were selected in the end. The process wasn’t very draining, the selected ones were free by 2:30 PM. The interviews didn’t last for more than 20 minutes. You need be prepared with your DSAs, OOPs, DBMS concepts as these are standard in most interviews. Having good projects to elevate your resume helps. They didn’t ask me a single question related to my extracurriculars(fests, committees), but this depends on the interviewer and the company.



All the best! :) Remember to stay positive and not worry about things that are not under your control. For any queries, reach out to me at sayyed.humaira@gmail.com

