

Persistent Systems | Software Engineer | Pune | Sept 2020 | (On-campus) Selected

I had appeared for Persistent Systems written test + Interview in September 2020 through college placement for a Software Engineer role. Total 3 rounds conducted.

Eligibility Criteria

Year of Graduation - 2021

Candidates from BE - CS and IT streams only

No live ATKT in any subject (Theory / Practical / Oral / any other) at the time of the selection process

10th and 12th Marks: Minimum 60%

BE Min 60% (aggregate till 3rd Year)

ROUND1: Test MCQ + Coding

So round 1 will be easy for you if you are good in aptitude (it comparatively had more weightage). Along with it, as usual, there were some MCQ on core subjects like Operating system, Computer Network, Object-Oriented programming, and C/C++ Programming. These were not very hard questions; you just need to know the basic concept. Then there were 2 or 3 Coding questions. I got all of them correct. They were easy, or we can say easy to medium level. So around 20-22 people cleared this round.

Among these those who cleared this test with very high marks were asked to appear for an advanced coding test for a higher package. So, again 2 coding questions for 1.5 hours were given one was easy one was medium. I got first fully correct and missed only 2 test cases of a second. I remember the first question was like this: There is a line defined on the X-axis with (x1, x2) as x1 as starting and x2 as the ending point of a line. Now you will be given an array of such lines A [ [x1, x2], [x3, x4], [x5, x6] .....] and you have to find max no. of overlapping lines. Only one among 20-22 appeared cleared this advanced coding (that was me)

ROUND2: Coding/Technical

Round2 was after 5 days after the results of round 1 and lasted for almost 50-55min. there was only one person who is going to interview me. First, he introduced himself and asked to introduce me. He asked to Tell me one of the good projects that I have done in past. I told him I have done loan prediction using machine learning but that was a bad idea. I knew machine learning only that much that I have used in my project. So, I was able to explain that much but he then started to ask some in-depth questions which I could not understand. So, it kind of backfired me. Then he said "Assume I have employees/hosts in my office interconnected via a network and I am giving you the data such as their bandwidth, total data consumption, etc. in an excel file to you at every hour runtime. Can you think of any machine learning model/algorithm that you can use to utilize this

collected data??". I was clueless but I tried something and that wasn't helping a tall. Then he asked me to rate myself in the following skills on a scale of 0 to five.

1. C/C++ Programming 4/5
2. Databases 3.5/5
3. Object-oriented Programming 3.5/5
4. Operating systems 4/5
5. Computer networks 3/5
6. Data structures 4.2/5

Then he asked one or two questions from each. First asked to write node structure for a binary tree then asked something about an inorder, preorder. Then some question/discussion on pointers and dangling pointer problem. Then said he has a record of 50 employees how to store in c++. I said we can store them in objects or in files. I wasn't very sure he was looking for that answer only on some another. Moving to next he also did ask something about B/B++ trees. Then one SQL query he asked from databases and a difference between having and where clause. Then asked for a 64-bit processor what is the largest memory size we can have. And that is all about it.

### ROUND3: HR

This round lasted for almost 15 min. There was an HR. So firstly, they asked me to introduce myself.

### HR

1. Tell me a little bit about you, your background?
2. What are your strengths?

In the end, he extended the offer to me and told me the onboarding formalities will be started shortly. Currently, I am working as an Intern at Persistent. (I am in the final Semester right now)

Personal Opinion: Overall, I would suggest preparing the resume and at least one project very thoroughly with code. Core subjects like Programming Concepts C/C++ OS, CN, DBMS should also be thorough (even though we know concepts but sometimes we could not phrase them in proper words so keep this also in mind).

