A High School Informatics Contest Experience

This blog post was translated by ChatGPT 4o.

Setting off from Guangzhou Luogang, we headed to Nanlang Town in Zhongshan. Initially, I thought it would take so long that I could finish both Chinese and math exams, but to my surprise, the Chinese exam was skipped, taking only 2 hours. Besides the well-known Zhongshan Memorial Middle School, other attractions in Nanlang Town are quite insignificant. Students of the Memorial Middle School often walk to Sun Yat-sen's Former Residence, and couples visit there, imagining Sun Yat-sen and Soong Ching-ling gazing affectionately at each other in silence. Sun Yat-sen's bed was wider than Yuyan's but shorter by more than ten centimeters. I guess Sun Yat-sen was a true six-foot man. A six-foot man lay on that bed every night from 1892 to 1895.

At around 7 a.m. on the 12th, we had breakfast at the first cafeteria of the Memorial School. The Memorial School has two cafeterias, which lack the elegance of Yuyan's, hence they are simply named: the First Cafeteria and the Second Cafeteria. The Second Cafeteria was closed today and was empty when I passed by at 7:30. In the First Cafeteria, at 7:20, many students in blue and white uniforms were having breakfast. It's unlikely that so many people woke up late collectively, and considering it's Saturday, it's probably because their weekend schedule is different from usual.

The Memorial School gives me the feeling of being on a university campus. It's very spacious here, with long sidewalks on both sides of the main road. If a sidewalk was built from Yuyan's teaching building to the cafeteria, it would seem absurd. But at the Memorial School, it feels natural. The school is built among trees, with lush greenery all around.

Before the exam, I met a chubby guy, let's call him Fat Brother. Fat Brother shared his experience learning algorithms with me. They had dozens of people playing CS together in the computer room. Later, the teacher felt they would be doomed if they kept playing, so he decisively stopped them, probably by cutting off the network. They then collectively played Minesweeper as a form of protest⋯

When we arrived at the computer room for the exam, the green grassy slope came into view. The exam was on Windows XP, not the depressing and distressing Linux. In the past few days, I installed Linux, got slightly familiar with the environment, and could write and debug code normally. However, it took me nearly five hours to really get proficient. If the exam was on Linux, it would be a fatal blow to people like Fat Brother who had never programmed on Linux before. I don't know how to compile Pascal on Linux, but finding the Linux command line—the terminal—could break the high-energy phosphate bonds in one's body one by one. Sitting on my right was Chen Yixiang from Shantou. He coded very quickly, completing all the tasks effortlessly and testing his programs with extreme data.

My exam process was much more convoluted. The examiners intended the first question to encourage us and boost our confidence, but I failed to live up to their good intentions and was heavily hit. "C++, please grant me the vast space to create a $100000 * 100000$ array." It replied, "I can't, please optimize your program and reduce its space complexity." I said, "What?" I had no choice but to fight to the death and accidentally reduced the $100000 * 100000$ array to 100000*3.

The examiners anticipated my frustration with the first question and gave me another one to boost my confidence. This time, I complied. The third question was about using a specified number of steps to clear a game. It was my first time writing such a fun program, and before I knew it, the exam was over⋯

The next day, I continued playing⋯It's not easy to get out of Yuyan, so I should enjoy myself when I'm out.