

## Team Individual Reflection

### **Personal Contribution**

As my team has become more familiar with working together, we adopted a standard starting arrangement during competitions: myself on paper and my other two team members on the computers. We started implementing this because I've been able to successfully code and semi-successfully debug on paper, which then takes little time to write up once a laptop becomes available. Additionally, I have found that starting on paper allows me to better understand the problems, as I can draw visuals and, therefore, also better construct algorithms. With that, coding on paper and then executing my written plan on a laptop usually takes up the first half of the total time, whereas I typically spend the second half debugging or making sense of more complex problems with my team members.

Traditionally, as a competition nears its end, each team member is working on a problem or at least familiar with what is being asked and may be stuck on potential solutions. As a result, we each enter the weekend with an "assigned" problem.

With the aforementioned starting arrangement, one major pre-competition responsibility I've adopted, in addition to reviewing the week's topic, is brushing up on basic and advanced Java syntax. I still code with a text editor and command line, and therefore, I assumed I had a good memory of all necessary Java syntax. When starting to code functions on paper, I soon realized that syntax is easier for me when typing than writing (i.e., keywords are highlighted differently). Therefore, before competitions, I've been attempting to memorize syntax in a traditional way (i.e., quizzing myself) to ensure I am using my time on paper efficiently, which minimizes the time I spend typing up my solution.

On the other hand, after competitions, in addition to up-solving with my team, a new practice I've embraced is reviewing competition problems and identifying patterns in the wording. Throughout the past semester, I've seen improvement in understanding these prompts. I initially found myself not comprehending the problems thoroughly enough, but now I've been able to identify keywords that hint at possible algorithms. Though it has been a slow learning curve for me, I have picked up on some keywords in the text in the earlier team competitions, and therefore, once provided with hints, I've been reviewing the problems, identifying keywords, and seeing if they consistently correlate with suggested algorithms.

### **Team Contribution Breakdown**

*Myself: 25%*

*Person B: 25%*

Person B and I approach problems very similarly, where we benefit by reviewing the problem, considering various approaches, and then implementing a solution. As a result, we have similar

speeds and progress in a competition setting. Since we are not as quick as Gabriel, we do not

progress as fast as he does and usually end up collaborating on more challenging problems towards the end of the competition time.

*Person C: 50%*

Person C is a brilliant programmer; thus, he works very fast. As a result, he completes problems much quicker than me, and when I've gotten stuck on problems, he has been excellent at identifying and mitigating the issue. When up solving, he again has been proven to be highly skilled as he will solve his assigned problems very fast and, at times, has been able to solve mine before me.