

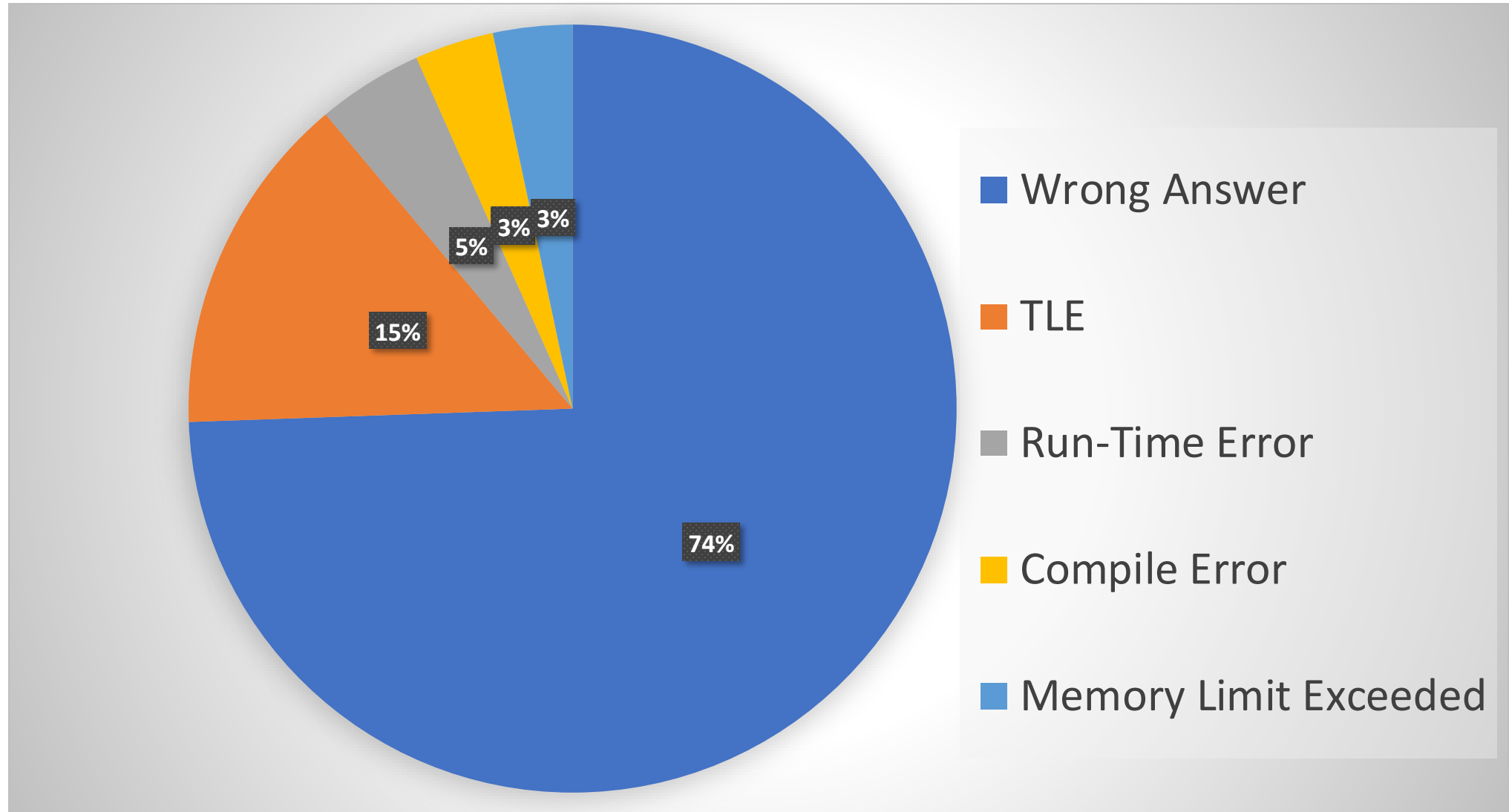
Competitive Programming

Recovery from Failure

Submission Outcomes

- After you submit
 - Accepted
 - Wrong Answer
 - Time Limit Exceeded (TLE)
 - Output Limit Exceeded
 - Runtime Error
 - Memory Limit Exceeded
 - Compile Error

My Unsuccessful Judgments



Re-read the Problem

- Look for details you may have missed
 - Sufficient capacity for your types?
 - Possible negative values?
 - Non-obvious inputs
 - Multiple edges between graph nodes or self loops
 - Duplicate values
 - Sneaky test cases you could write?
 - Multiple test cases in the input?
- **You can do this offline**



Read your code

- Look for silly mistakes
 - Using the wrong variable, array, etc.
 - Forgetting to implement something
 - Bad logic / conditionals
 - Forgetting to reset, initialize or re-initialize something
- **Print out your code and you can do this offline**

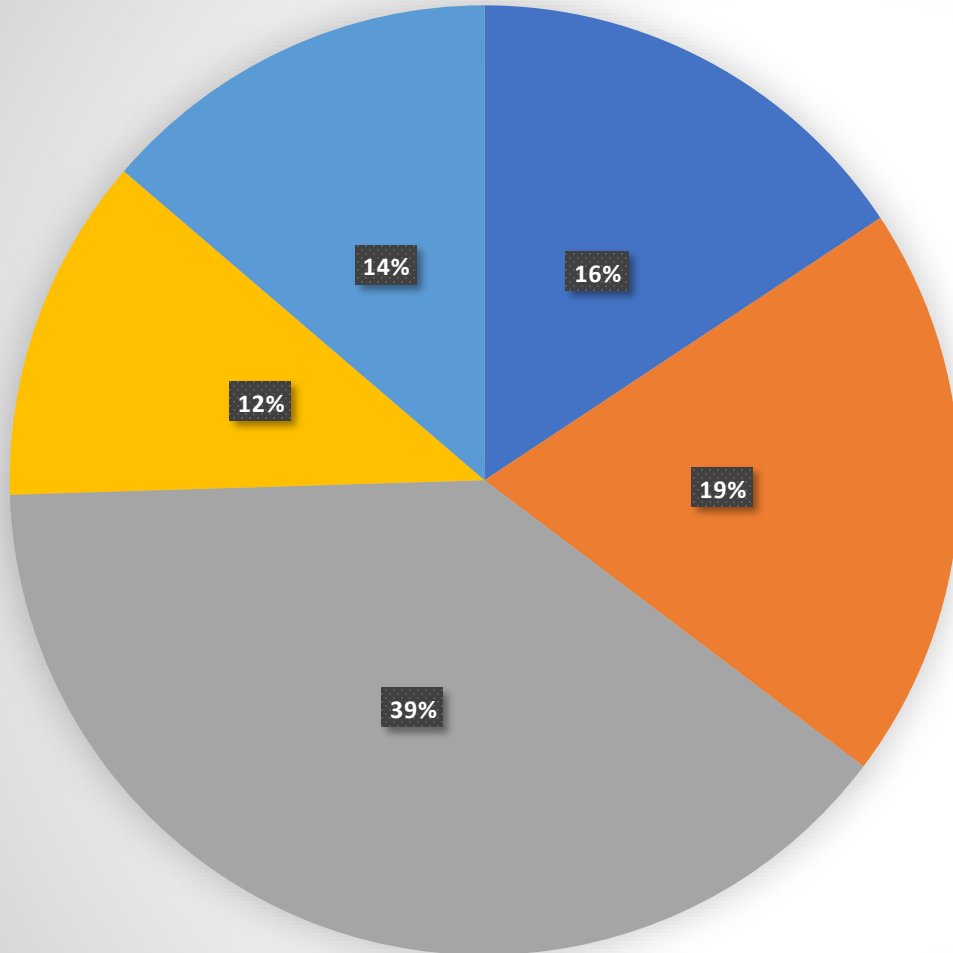
Write some test cases

- Can you write a simple test case that
 - demonstrates a special case?
 - achieves the worst-case performance of your technique?
- You can (mostly) work on this offline

Generate some test cases

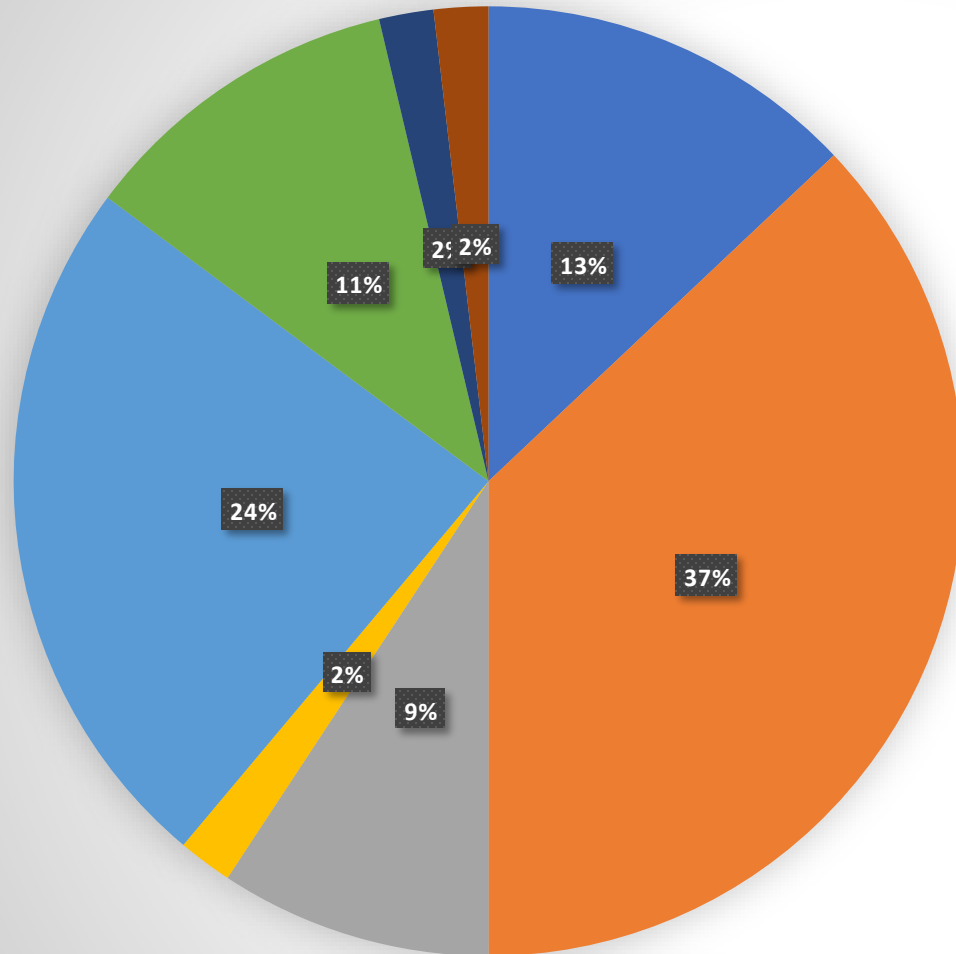
- You can try writing some code to generate a test case.
- A randomly generated test can help you with:
 - cases you wouldn't think of.
 - large tests you couldn't write yourself.
- You may be able to write a simple, naïve solution to compare against.
- This does require access to the computer 😞

Fixing My Mistakes



- Problem inspection
- Code inspection / tracing
- Simple test case to write.
- Generated test case
- Cheated and downloaded a test case.

My Mistakes



- Type capacity or precision.
- Small coding error
- Significant coding error
- Misunderstood the problem
- Missed particular case(s)
- TLE
- Runtime Error
- Missed a detail in the problem statement.