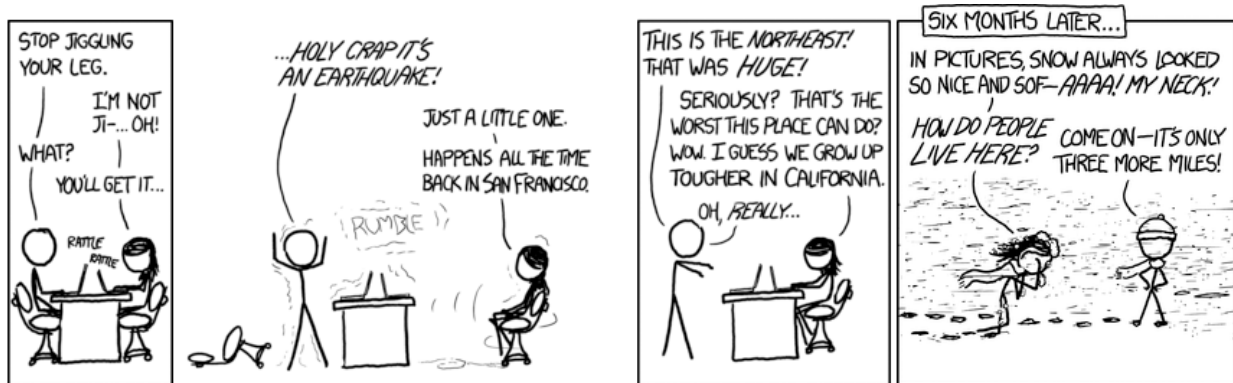


# CS140 - Group Assignment 9

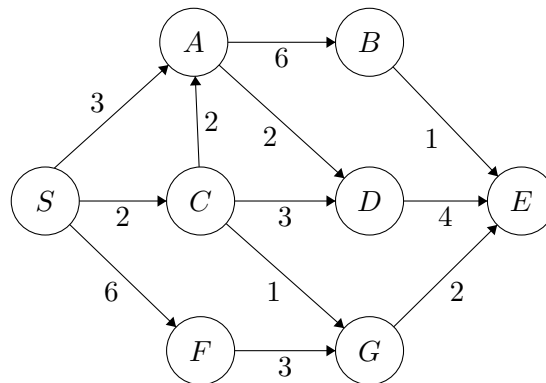
Due: Friday, March 29 at 10pm



[https://www.explainxkcd.com/wiki/index.php/1037:\\_Umwelt](https://www.explainxkcd.com/wiki/index.php/1037:_Umwelt)

1. Discuss this problems and/or any of the graph algorithms we've covered so far.

(a) Consider the following weighted, directed graph:



- i. Is this a DAG (directed acyclic graph)?
- ii. If you run a BFS starting from vertex C in what order do you visit the vertices? Assume adjacent vertices are returned in alphabetical order, i.e., would be added to the queue in alphabetical order.
- iii. If you run Dijkstra's algorithm with source vertex s, what is the order in which vertices are removed from the priority queue? Break ties alphabetically.

2. We're almost 2/3rds of the way through the course.

- (a) What has been the most challenging thing about this course?
- (b) Are there any topics that you hope we'll cover in the remaining part of the course?