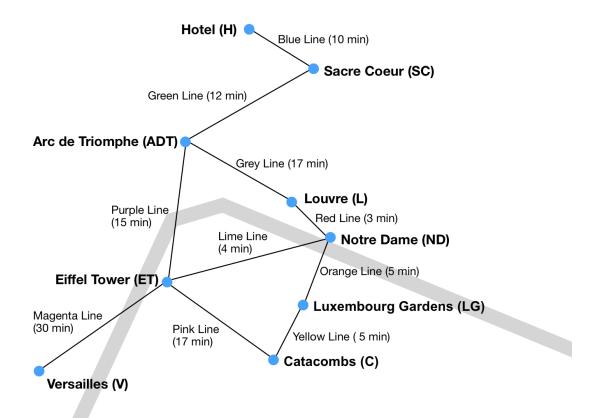
CSE 331 21sp Section 7 Worksheet

Graph searching. We're going to take a trip! To Paris!! To help us plan, a friend has sent us a simplified map of the Paris Metro showing some of the main stops we'll be using. Here it is:



The map, of course, is a graph where the nodes are Metro stops and the edges are labeled with Metro line names and travel times between stops. We would like to use our knowledge of graph search algorithms to discover paths in the graph. Answer the questions on the next page.

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Question 5. (cont.) (a) Find the path with fewest number of transfers (i.e., fewest number of intermediate stops) between your Hotel (H) and the Luxembourg Gardens

answer. Fil	ll in your ans	wers bel	ow. If there	s. Indicate the a e are ties when o h" (i.e., use alph	computing th	e path, you	
(i) Algorithm used:		В	FS	Total travel t	Total travel time:		
	om H to LG for each edg		est transfers	s (show the line	used – Blue,	Green, etc. – and	
If there are	two or more	paths w	ith the same		, write down	to Catacombs (C). In one of them. As	
(i) Algorithm used: Dijks			tra's	Total travel time:			
(ii) Fastest each edge) priority que	:	C to C (s	how the lin	e used – Blue, C	Green, etc. – a	and travel time for	
Path	Cost		Node	Finished	Cost	Prev	