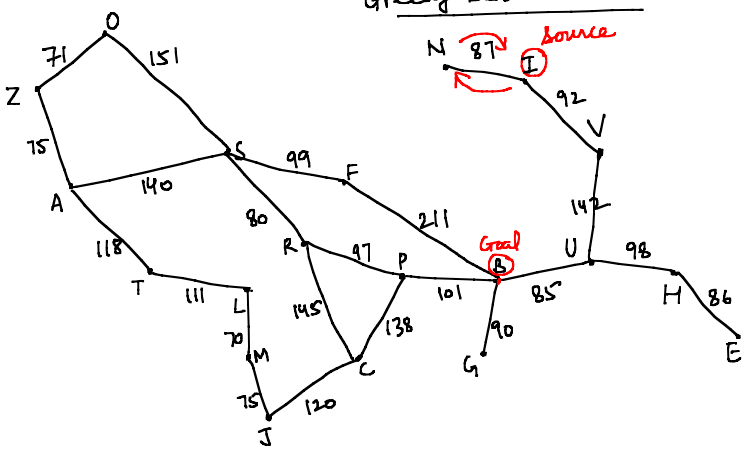
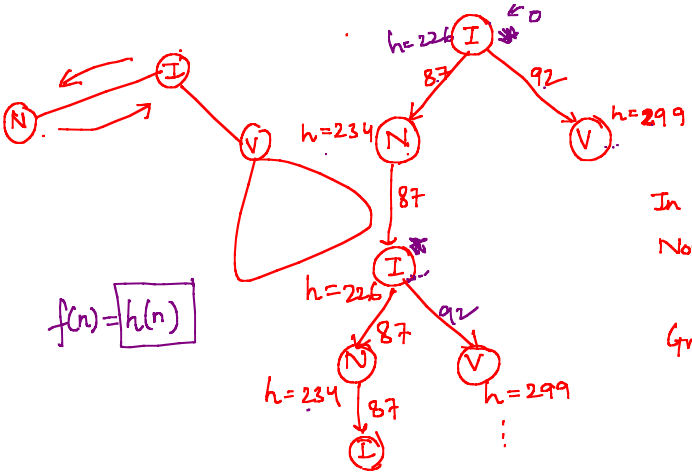
31/1/2022

AI.

Greedy Best First Search.



	$h_{SLD}(B)$		
A	366	P	10
B	0	R	193
C	160	S	253
D	242	T	329
E	161	U	80
F	176	V	299
G	77	Z	374
H	151		
I	226		
L	244		
M	241		
N	234		
O	380		



~~I N V I~~

In tree paradigm, Not complete

Graph paradigm, Complete

$f(n) = h(n)$

$h'(n) > h(n)$

A* Search

Idea:- avoid expanding paths / nodes that are already expensive

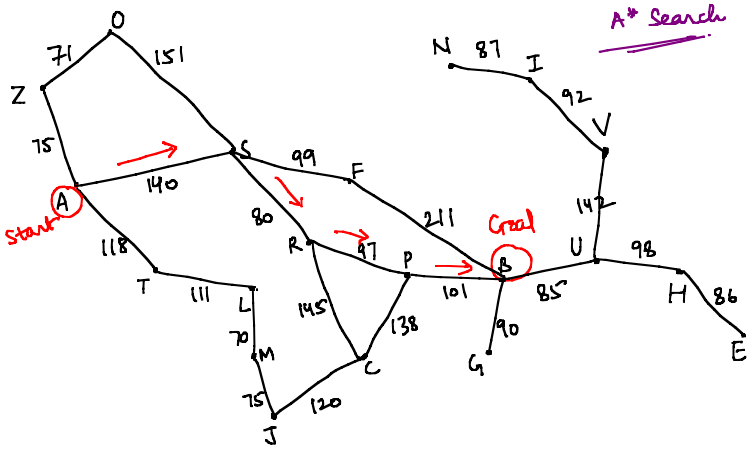
$$f(n) = g(n) + h(n)$$

$f(n)$: Estimated Total cost from start to goal through node n.

$g(n)$: cost from start to n.

$h(n)$: Estimated cost from n to goal.

A* Search



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A $\xrightarrow{140}$ S $\xrightarrow{80}$ R $\xrightarrow{97}$ P $\xrightarrow{101}$ B = 418*

A $\xrightarrow[140]{}$ S $\xrightarrow[99]{}$ F $\xrightarrow[211]{}$ B = 450

Heuristics

- Admissibility
- Consistency