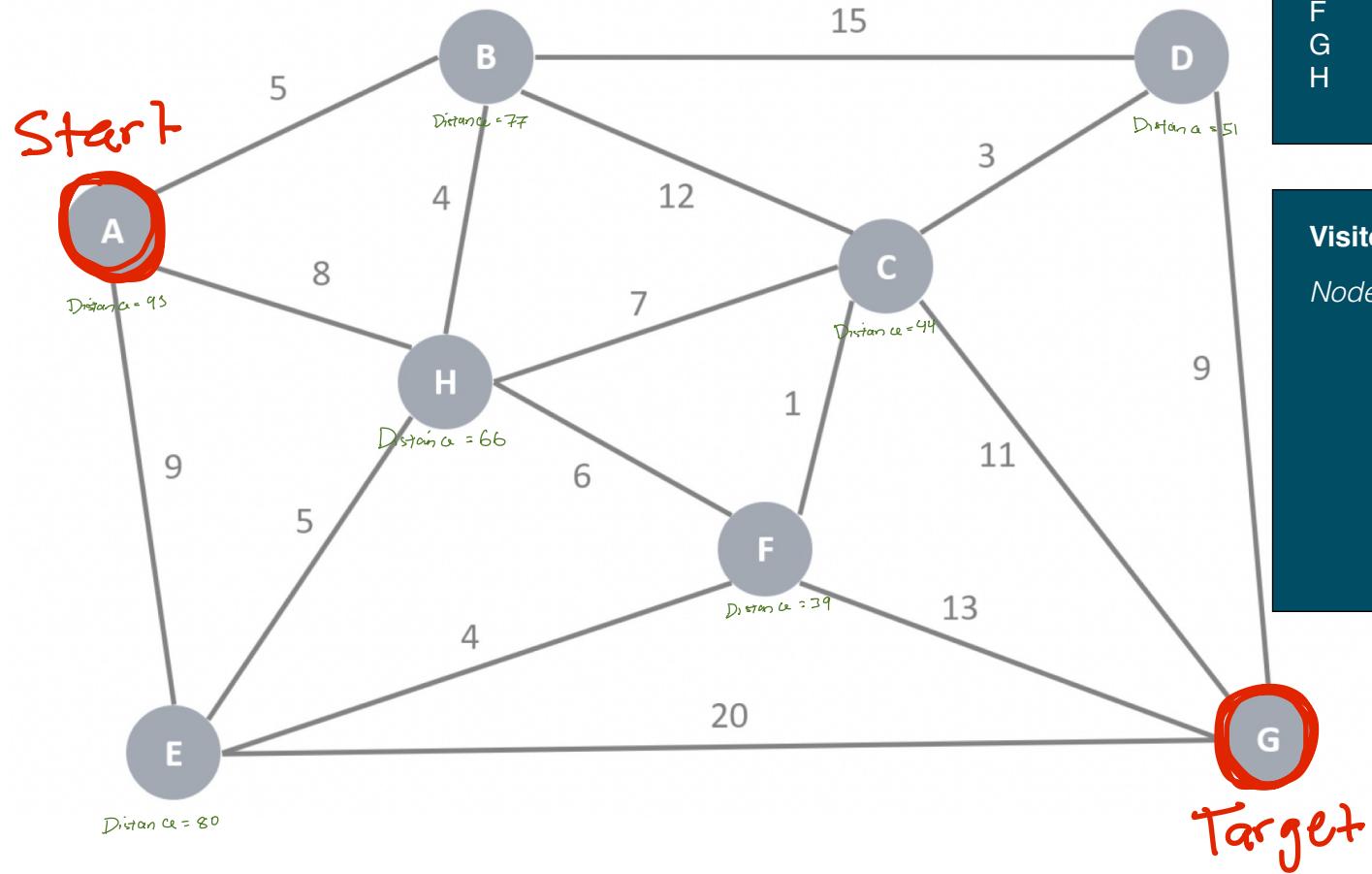


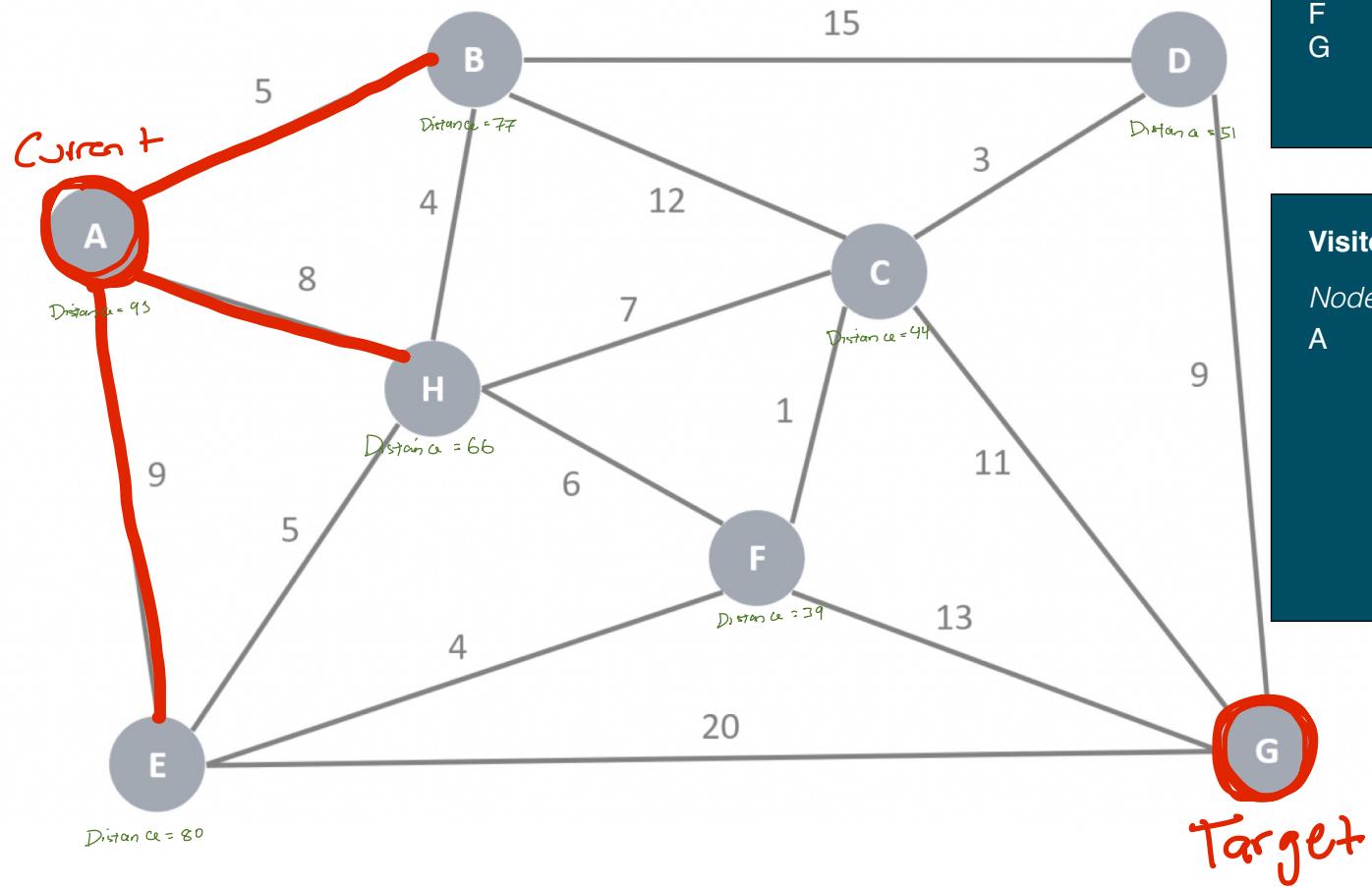
A Star Shortest Path Algorithm



Priority Queue			
Node	Distance	Previous	Heuristic
A	0	Null	93
B	∞	Null	∞
C	∞	Null	∞
D	∞	Null	∞
E	∞	Null	∞
F	∞	Null	∞
G	∞	Null	∞
H	∞	Null	∞

Visited			
Node	Distance	Previous	Heuristic

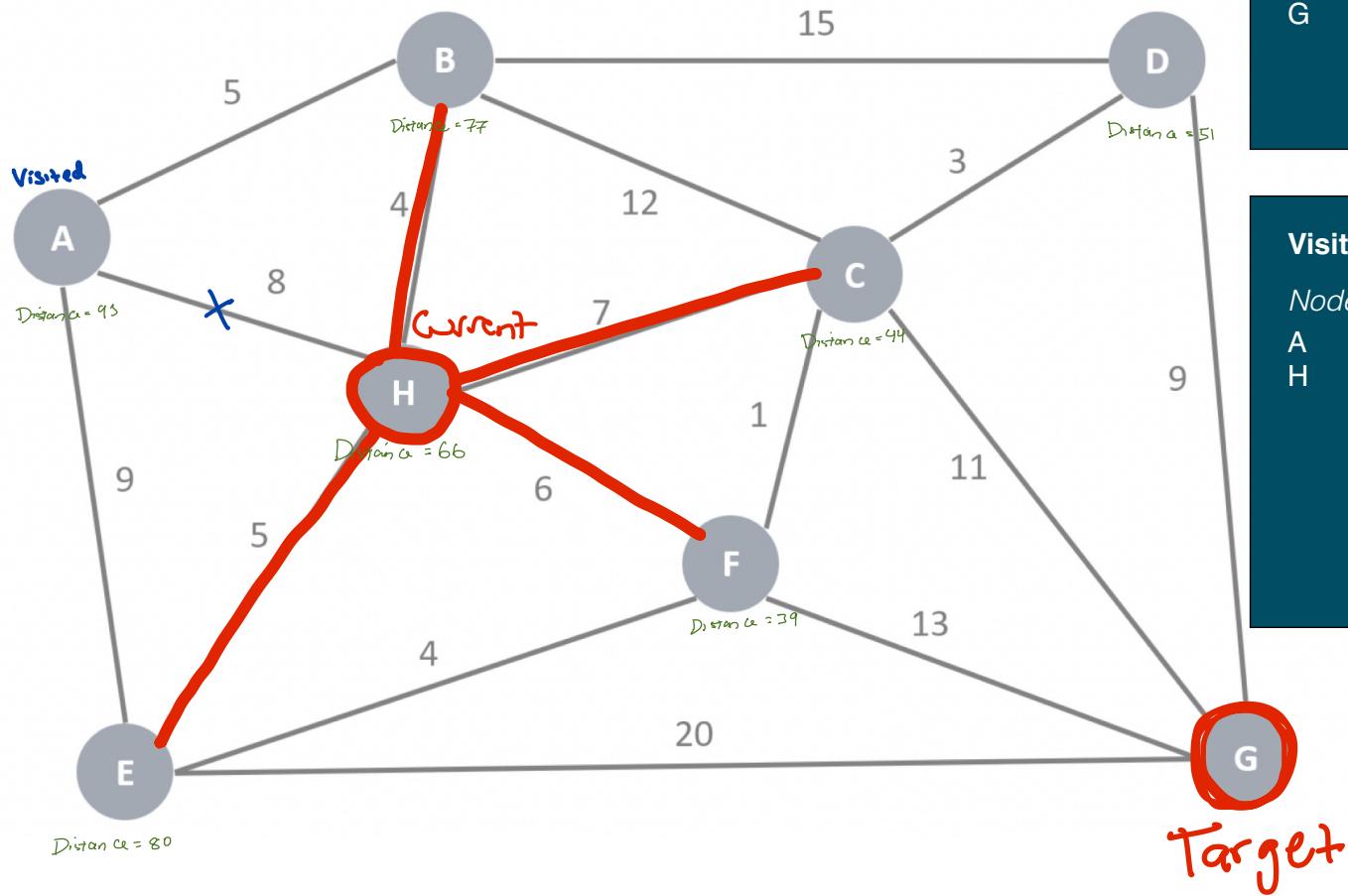
A Star Shortest Path Algorithm



Priority Queue			
Node	Distance	Previous	Heuristic
H	8	A	74
B	5	A	82
E	9	A	89
C	∞	Null	∞
D	∞	Null	∞
F	∞	Null	∞
G	∞	Null	∞

Visited			
Node	Distance	Previous	Heuristic
A	0	Null	93

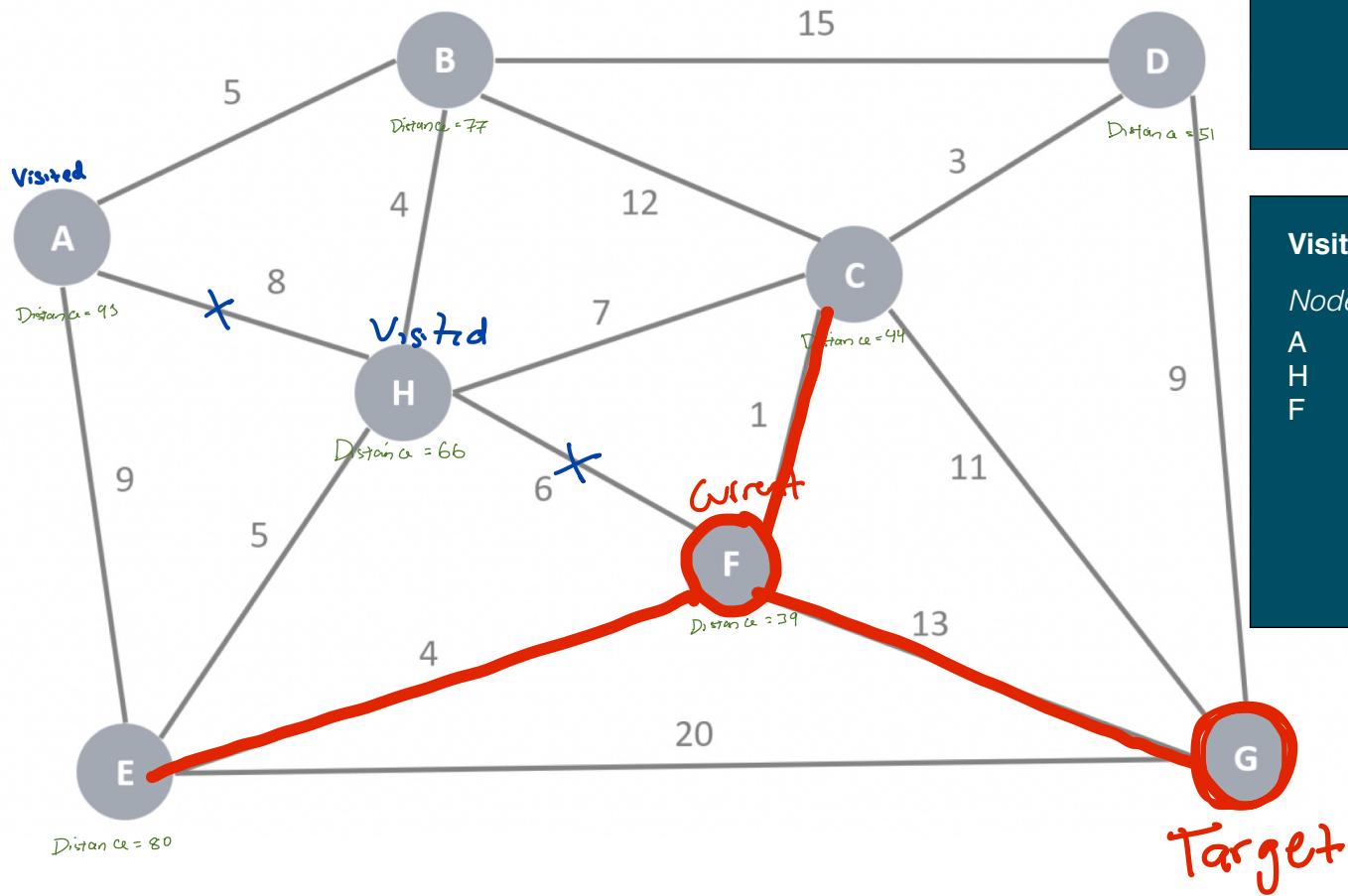
A Star Shortest Path Algorithm



Priority Queue			
Node	Distance	Previous	Heuristic
F	14	H	53
C	15	H	74
B	5	A	82
E	9	A	89
D	∞	Null	∞
G	∞	Null	∞

Visited			
Node	Distance	Previous	Heuristic
A	0	Null	93
H	8	A	74

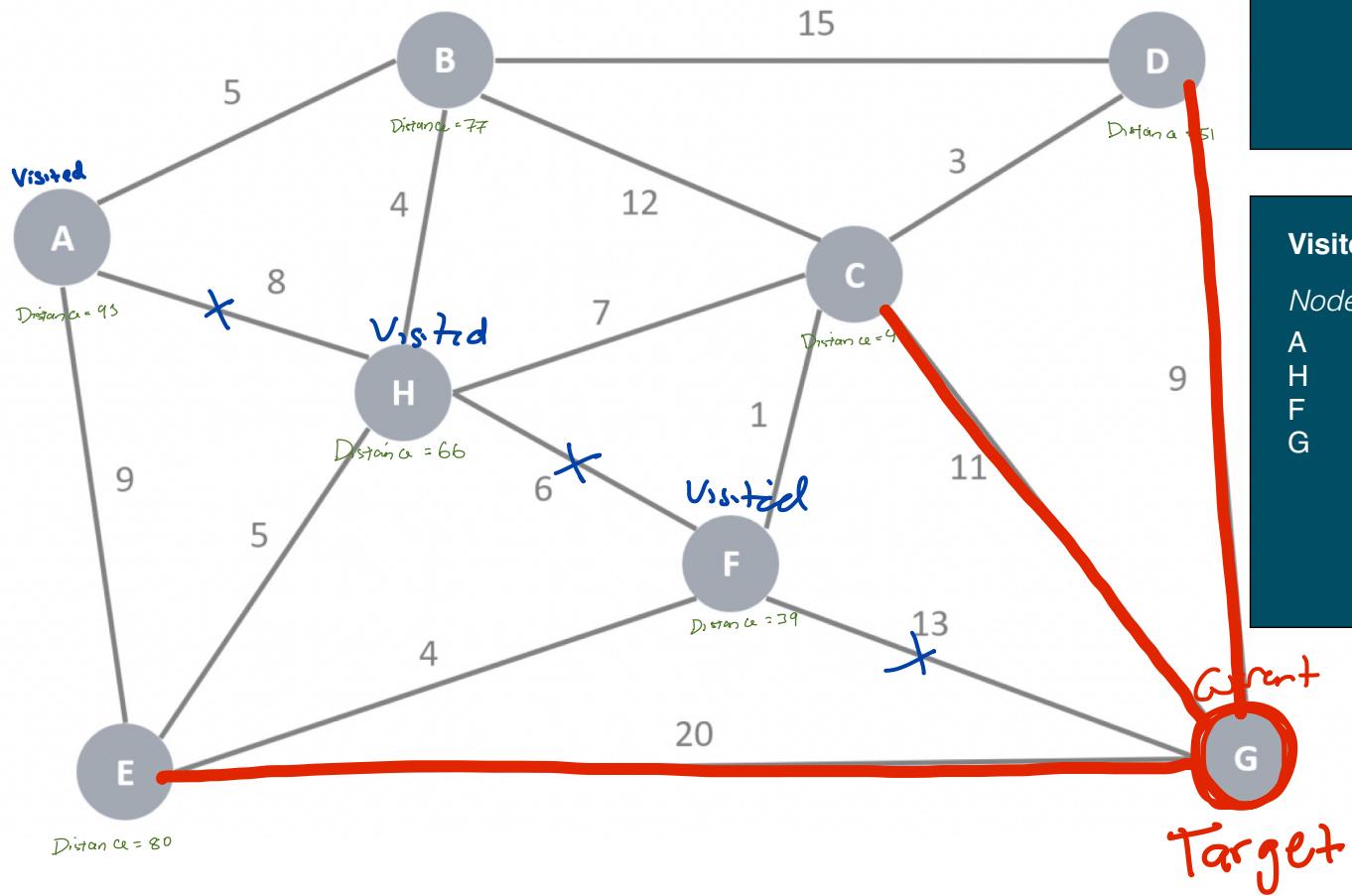
A Star Shortest Path Algorithm



Priority Queue			
Node	Distance	Previous	Heuristic
G	27	F	27
C	15	H	59
B	5	A	82
E	9	A	89
D	∞	Null	∞

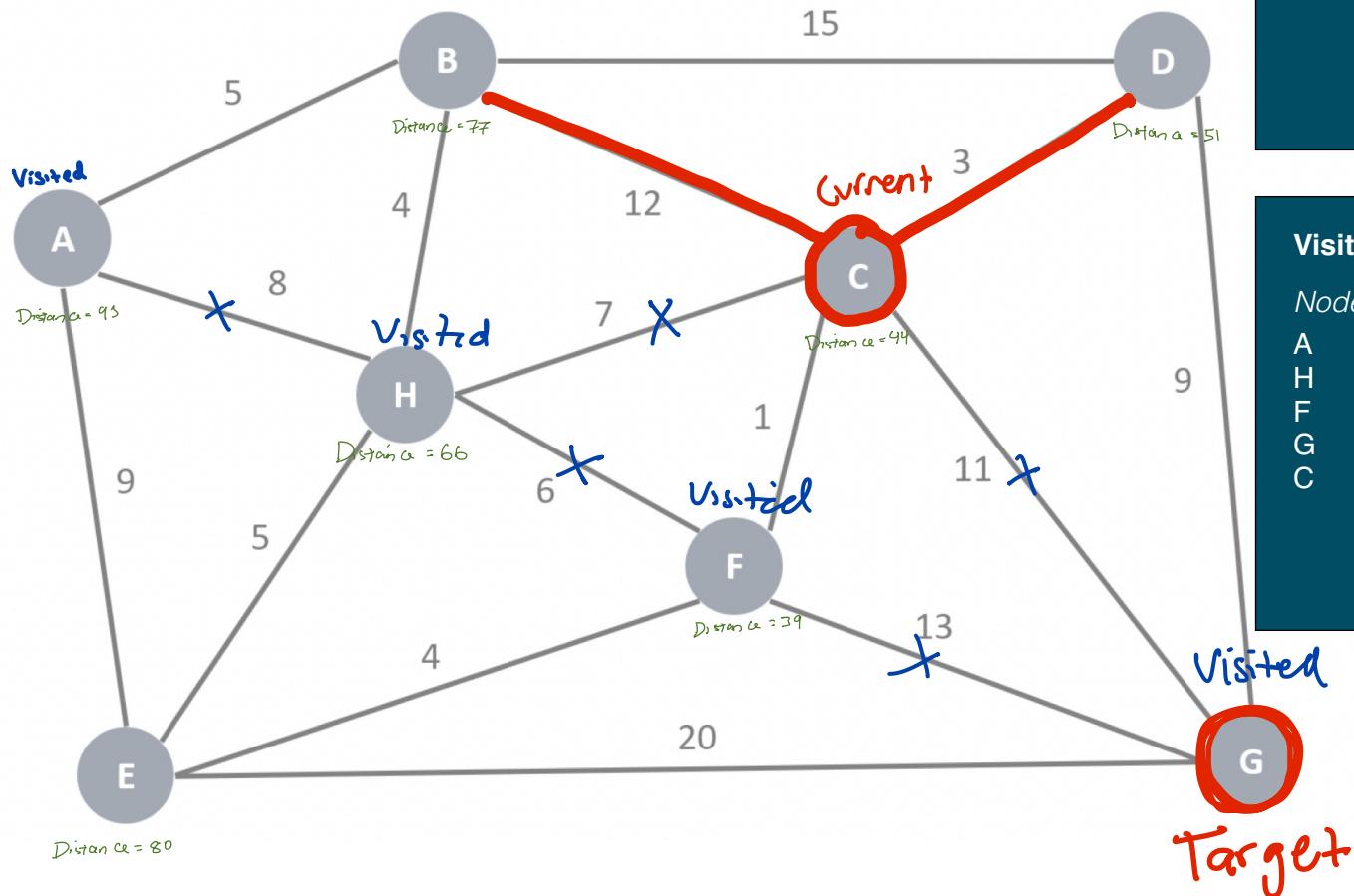
Visited			
Node	Distance	Previous	Heuristic
A	0	Null	93
H	8	A	74
F	14	H	53

A Star Shortest Path Algorithm

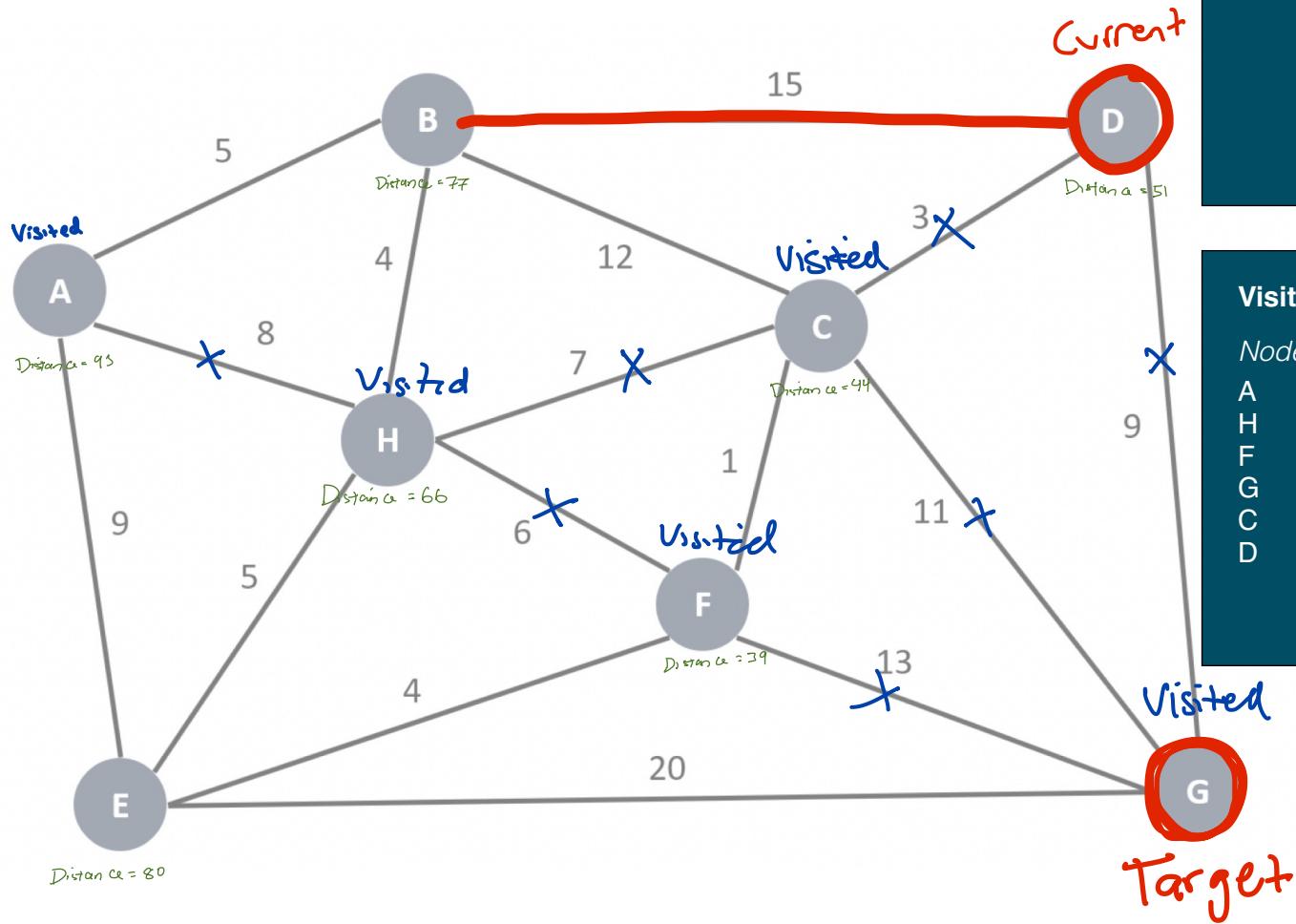


Shortest Path: $A \rightarrow H \rightarrow F \rightarrow G$
 (Based on weight and distance)

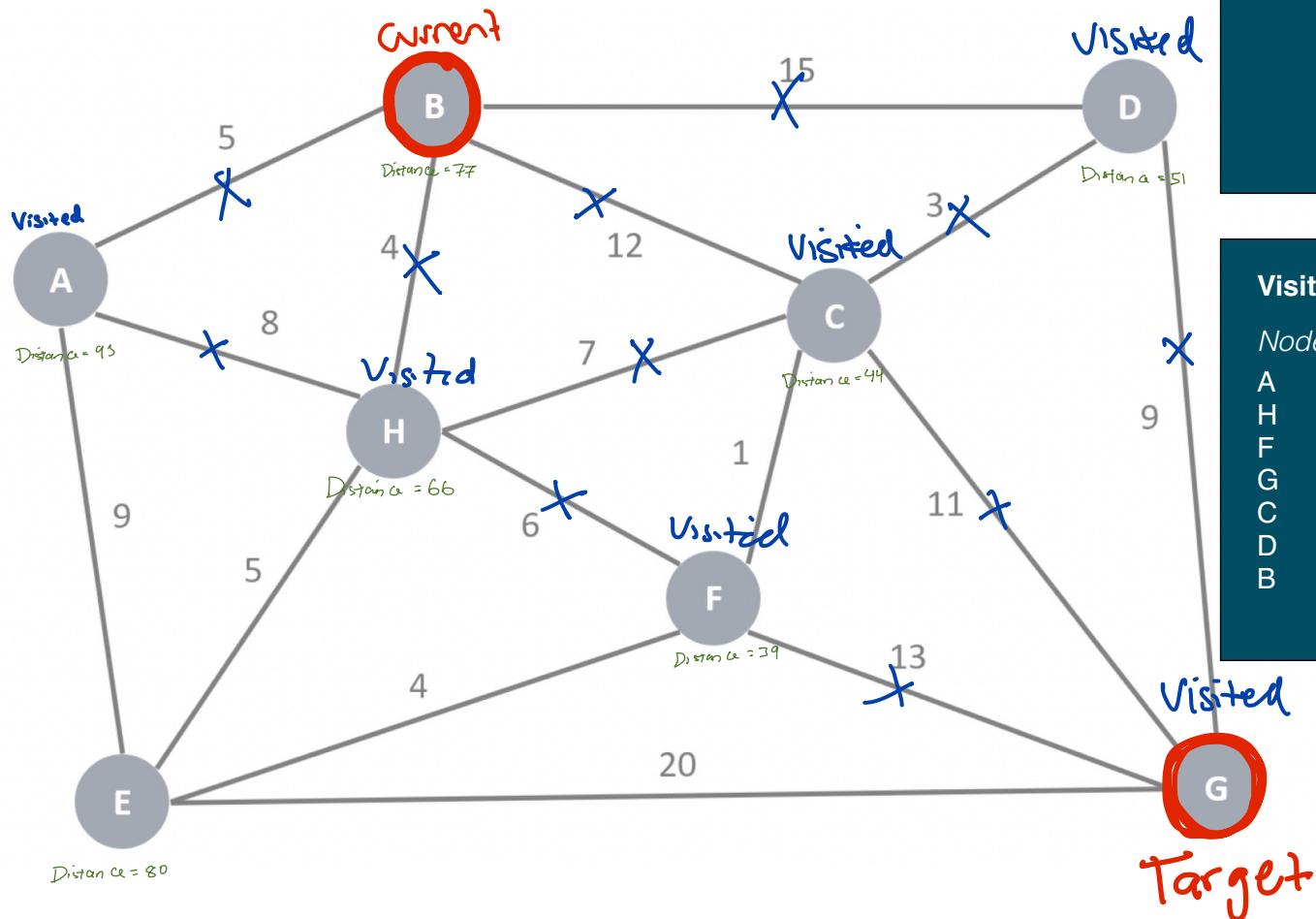
A Star Shortest Path Algorithm



A Star Shortest Path Algorithm



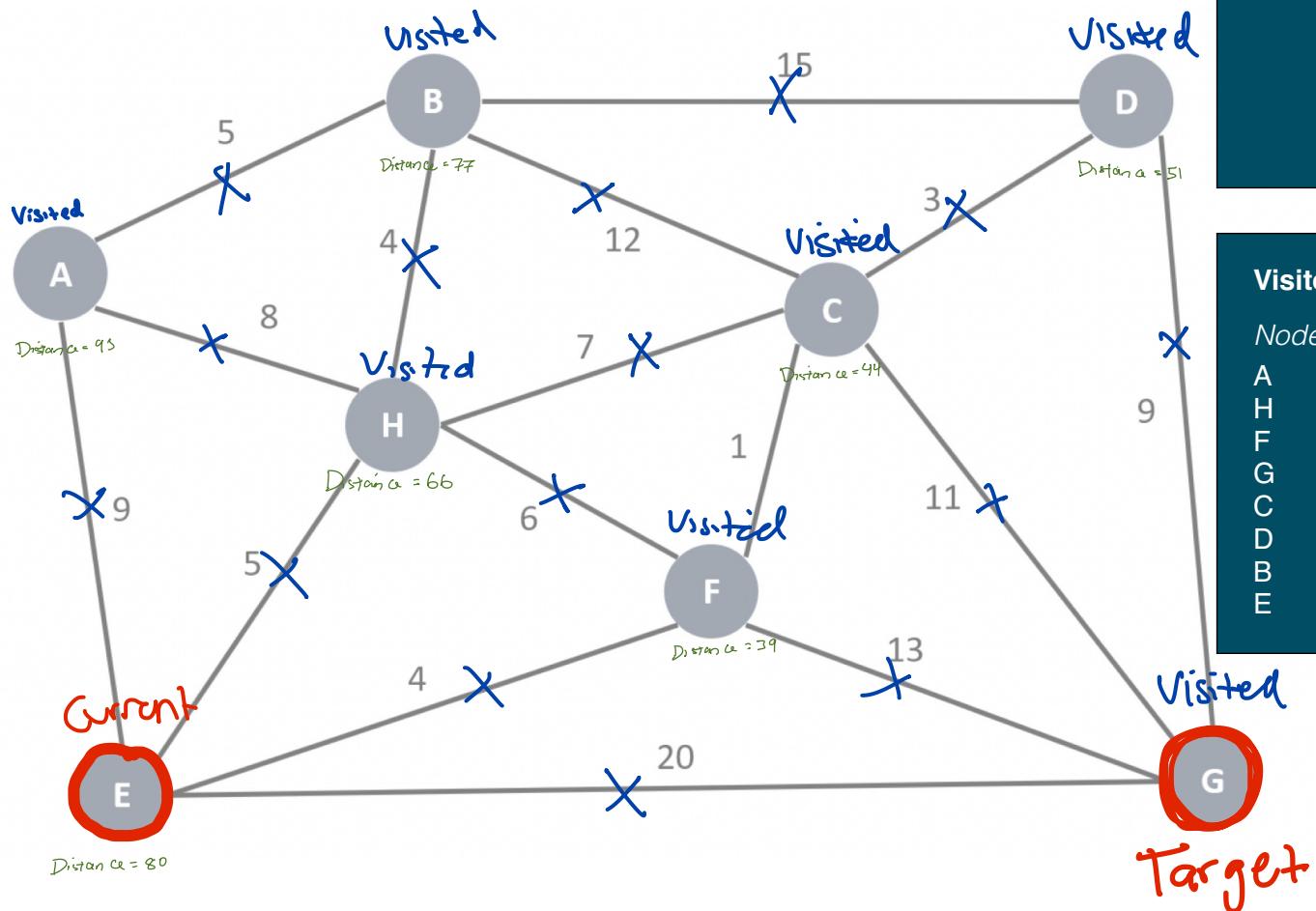
A Star Shortest Path Algorithm



Priority Queue			
Node	Distance	Previous	Heuristic
E	9	A	89

Visited				
Node	Distance	Previous	Heuristic	
A	0	Null	93	
H	8	A	74	
F	14	H	53	
G	27	F	27	
C	15	H	59	
D	18	C	69	
B	5	A	82	

A Star Shortest Path Algorithm



Priority Queue

Node	Distance	Previous	Heuristic
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Visited

Node	Distance	Previous	Heuristic
A	0	Null	93
H	8	A	74
F	14	H	53
G	27	F	27
C	15	H	59
D	18	C	69
B	5	A	82
E	9	A	89