Path	G(x) (cost of x from start)	H(x)	F(x)= G(x) + H(x)
S	0	7	7
S->A	3	9	12
S->D	2	5	7
S->B	3	4	7
S->E	4	3	7
S->C	5	2	7
S->G	7	0	7

Shortest Path: S-D-B-E-G
Path is admissible as H(x) <= F(x) for all nodes.

Path is consistent:
S; H(S) <= C(S,D) + H(D); 7<=2+5
D; H(D) <= C(D,B) + H(B); 5<=1+4
B; H(B) <= C(B,E) + H(E); 4<=1+3
E; H(E) <= C(E,G) + H(G); 3<=3+0