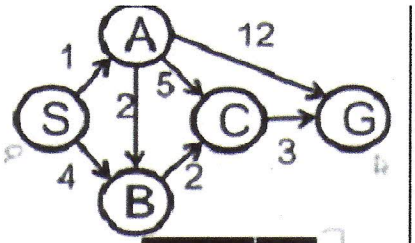
A* Algorithm Example



State	H
S	7
A	6
B	2
C	1
G	0

S, f(n) = g(n) + h(n)

#0 **S** $f(S) = 0+7 = 7$

#1 **SA** $f(A) = g(A) + h(A) = (0+1)+6 = 7$

#2 **SB** $f(B) = g(B) + h(B) = (0+4)+2 = 6$

#3 **SBC** $f(C) = g(C) + h(C) = (4+2)+1 = 7$

#10 **SBCG** $f(G) = g(G) + h(G) = (6+3)+0 = 9$

#4 **SAB** $f(B) = g(B) + h(B) = (1+2)+2 = 5$

#5 **SAC** $f(C) = g(C) + h(C) = (1+5)+1 = 6$

#6 **SAG** $f(G) = g(G) + h(G) = (1+12)+0 = 13$

#7 **SABC** $f(C) = g(C) + h(C) = (3+2)+1 = 6$

#9 **SACG** $f(G) = g(G) + h(G) = (6+3)+0 = 9$

#8 **SABCG** $f(G) = g(G) + h(G) = (5+3)+0 = 8$