Solving Air Cargo Problem 1 using breadth_first_search...

# Actions	Expansions	Goal Tests	New Nodes
20	43	56	178

Plan length: 6 Time elapsed in seconds: 0.0035527779999999926
Load(C1, P1, SFO)
Load(C2, P2, JFK)
Fly(P2, JFK, SFO)
Unload(C2, P2, SFO)
Fly(P1, SFO, JFK)
Unload(C1, P1, JFK)
Solving Air Cargo Problem 1 using depth_first_graph_search...

# Actions	Expansions	Goal Tests	New Nodes
20	21	22	84

Plan length: 20 Time elapsed in seconds: 0.002123834000000005
Fly(P1, SFO, JFK)
Fly(P2, JFK, SFO)
Load(C2, P1, JFK)
Fly(P1, JFK, SFO)
Fly(P2, SFO, JFK)
Unload(C2, P1, SFO)
Fly(P1, SFO, JFK)
Fly(P2, JFK, SFO)
Load(C2, P2, SFO)
Fly(P1, JFK, SFO)
Load(C1, P2, SFO)
Fly(P2, SFO, JFK)
Fly(P1, SFO, JFK)
Unload(C2, P2, JFK)
Unload(C1, P2, JFK)
Fly(P2, JFK, SFO)
Load(C2, P1, JFK)
Fly(P1, JFK, SFO)
Fly(P2, SFO, JFK)
Unload(C2, P1, SFO)
Solving Air Cargo Problem 1 using uniform_cost_search...

# Actions	Expansions	Goal Tests	New Nodes
20	60	62	240

Plan length: 6 Time elapsed in seconds: 0.005504161000000007
Load(C2, P2, JFK)
Fly(P2, JFK, SFO)
Load(C1, P2, SFO)
Unload(C2, P2, SFO)
Fly(P2, SFO, JFK)
Unload(C1, P2, JFK)
Solving Air Cargo Problem 1 using greedy_best_first_graph_search with h_unmet_goals...

# Actions	Expansions	Goal Tests	New Nodes
20	7	9	29

Plan length: 6 Time elapsed in seconds: 0.0009007209999999932
Load(C1, P1, SFO)
Load(C2, P2, JFK)
Fly(P2, JFK, SFO)
Unload(C2, P2, SFO)
Fly(P1, SFO, JFK)
Unload(C1, P1, JFK)
Solving Air Cargo Problem 1 using greedy_best_first_graph_search with h_pg_levelsum...

# Actions	Expansions	Goal Tests	New Nodes
20	6	8	28

Plan length: 6 Time elapsed in seconds: 0.26430812000000004
Load(C1, P1, SFO)
Fly(P1, SFO, JFK)
Unload(C1, P1, JFK)
Load(C2, P2, JFK)

Fly(P2, JFK, SFO)
Unload(C2, P2, SFO)
Solving Air Cargo Problem 1 using greedy_best_first_graph_search with h_pg_maxlevel...

# Actions	Expansions	Goal Tests	New Nodes
20	6	8	24

Plan length: 6 Time elapsed in seconds: 0.19882094300000003
Load(C1, P1, SFO)
Load(C2, P2, JFK)
Fly(P2, JFK, SFO)
Fly(P1, SFO, JFK)
Unload(C2, P2, SFO)
Unload(C1, P1, JFK)
Solving Air Cargo Problem 1 using greedy_best_first_graph_search with h_pg_setlevel...

# Actions	Expansions	Goal Tests	New Nodes
20	6	8	28

Plan length: 6 Time elapsed in seconds: 0.35514772400000005
Load(C1, P1, SFO)
Fly(P1, SFO, JFK)
Unload(C1, P1, JFK)
Load(C2, P2, JFK)
Fly(P2, JFK, SFO)
Unload(C2, P2, SFO)
Solving Air Cargo Problem 1 using astar_search with h_unmet_goals...

# Actions	Expansions	Goal Tests	New Nodes
20	50	52	206

Plan length: 6 Time elapsed in seconds: 0.005250681000000035
Load(C2, P2, JFK)
Fly(P2, JFK, SFO)
Unload(C2, P2, SFO)
Load(C1, P2, SFO)
Fly(P2, SFO, JFK)
Unload(C1, P2, JFK)
Solving Air Cargo Problem 1 using astar_search with h_pg_levelsum...

# Actions	Expansions	Goal Tests	New Nodes
20	28	30	122

Plan length: 6 Time elapsed in seconds: 0.67017619
Load(C2, P2, JFK)
Fly(P2, JFK, SFO)
Unload(C2, P2, SFO)
Load(C1, P2, SFO)
Fly(P2, SFO, JFK)
Unload(C1, P2, JFK)
Solving Air Cargo Problem 1 using astar_search with h_pg_maxlevel...

# Actions	Expansions	Goal Tests	New Nodes
20	43	45	180

Plan length: 6 Time elapsed in seconds: 0.7353090330000001
Load(C2, P2, JFK)
Fly(P2, JFK, SFO)
Load(C1, P2, SFO)
Unload(C2, P2, SFO)
Fly(P2, SFO, JFK)
Unload(C1, P2, JFK)
Solving Air Cargo Problem 1 using astar_search with h_pg_setlevel...

# Actions	Expansions	Goal Tests	New Nodes
20	33	35	138

Plan length: 6 Time elapsed in seconds: 1.0101642910000002
Load(C2, P2, JFK)
Fly(P2, JFK, SFO)
Unload(C2, P2, SFO)
Load(C1, P2, SFO)
Fly(P2, SFO, JFK)
Unload(C1, P2, JFK)