① Breadth-first Search

Open list	Explored set
(START)	∅
P, E, (D)	START
C, B, P, (E)	D START
R, H, C, B, (P)	E D START
Q, R, H, C, (B)	P E D START
A, Q, R, H, (C)	B P E D START
A, Q, R, (H)	C B P E D START
A, Q, (R)	H C B P E D START
F, A, (Q)	R H C B P E D START
F, (A)	Q R H C B P E D START
(F)	A Q R H C B P E D START
GOAL	F A Q R H C B P E D START

Finish!

PATH: START → D → E → P → B → C → H → R → Q → A → F → GOAL

Path length = 11

Path found : START → E → R → F → GOAL depth = 4

② Uniform Cost Search

Open list	Explored set
(START)	∅
E(9), D(3), (P(1))	START
Q(1+15), E(9), (D(3))	P, START
Q(1+15), C(3+8), E(3+2), (B(3+1))	D, P, START
Q(1+15), C(3+8), A(3+1+2), (E(3+2))	B, D, P, START
Q(1+15), R(3+2+9), C(3+8), H(3+2+1), (A(3+1+2))	E, B, D, P, START
Q(1+15), R(3+2+9), C(3+8), (H(3+2+1))	A, E, B, D, P, START
R(3+2+9), C(3+8), (Q(3+2+1+4))	H, A, E, B, D, P, START

R(3+2+1+4+3) → C(3+8) → Q, H, A, E, B, D, P, START

R(3+2+1+4+3) → C, Q, H, A, E, B, D, P, START

F(3+2+1+4+3+5) → R, C, Q, H, A, E, B, D, P, START

GOAL (3+2+1+4+3+5+5) = 23 → F, R, C, Q, H, A, E, B, D, P, START

Final Path: START – D → E → H → Q → R → F → GOAL

③ Depth-first Search (DFS)

START

START D

START DB

START DBA

START DC

START DCA

START DE

START DEH

START DEHP

START DEHPQ

START DEHPQR

START DEHPQRF

START DEHPQRFC

START DEHPQRFCA

START DEHPQRFGOAL

④ Bidirectional Search (BFS)

Explored Set
START
P E (D) →
C B P (E) →
R H C B P

Explored Set
GOAL
← (F)
R

Finish.! ⇒ Path: START → E → R → F → GOAL