

1. Algoritma Breadth-First Search (BFS)

* Search Tree :

→ Mulai dari S :

→ Explore A, B, C :

→ Dari A : E

→ Dari B : D

→ Dari E : F

→ Dari F : G (ketemu)

* Route : $S \rightarrow A \rightarrow E \rightarrow F \rightarrow G$

* Total cost : $6 + 6 + 4 + 3 = 19$

2. Algoritma Depth-First Search (DFS)

* Search Tree :

→ Mulai dari S :

→ Explore A :

→ Explore E :

→ Explore F :

→ Explore G (ketemu)

* Route : $S \rightarrow A \rightarrow E \rightarrow F \rightarrow G$

* Total cost : $6 + 6 + 4 + 3 = 19$

3. Algoritma uniform cost search (UCS)

* Search tree

→ Mulai dari S (cost 0)

→ Explore A (cost 6)

→ Explore E (cost 12)

→ Explore F (cost 16)

→ Explore G (cost 19 ketemu) ketemu

→ Explore B (cost 5)

→ Explore ~~E~~ (cost 11) lebih rendah (✓)

→ Explore F (cost 15) lebih rendah (✓)

→ Explore G (cost 18) lebih rendah (✓)

→ Explore D (cost 12)

→ Explore F (cost 18) lebih tinggi (x)

→ Explore C (cost 10)

→ Explore D (cost 16) lebih tinggi (x)

* Route : $S \rightarrow B \rightarrow E \rightarrow F \rightarrow G$

* Total cost : $5 + 6 + 4 + 3 = 18$



4. Algoritma Greedy Best First Search :

* Search Tree :

→ Mulai dari S :

(Bandingin A(6), B(5), C(10) : B paling kecil)

→ Explore B :

(Bandingin A(6), E(6), C(10) : E paling kecil)

→ Explore E :

(Bandingin A(6), F(9), C(10) : F paling kecil)

→ Explore F :

(Bandingin A(6), G(3), C(10) : G paling kecil)

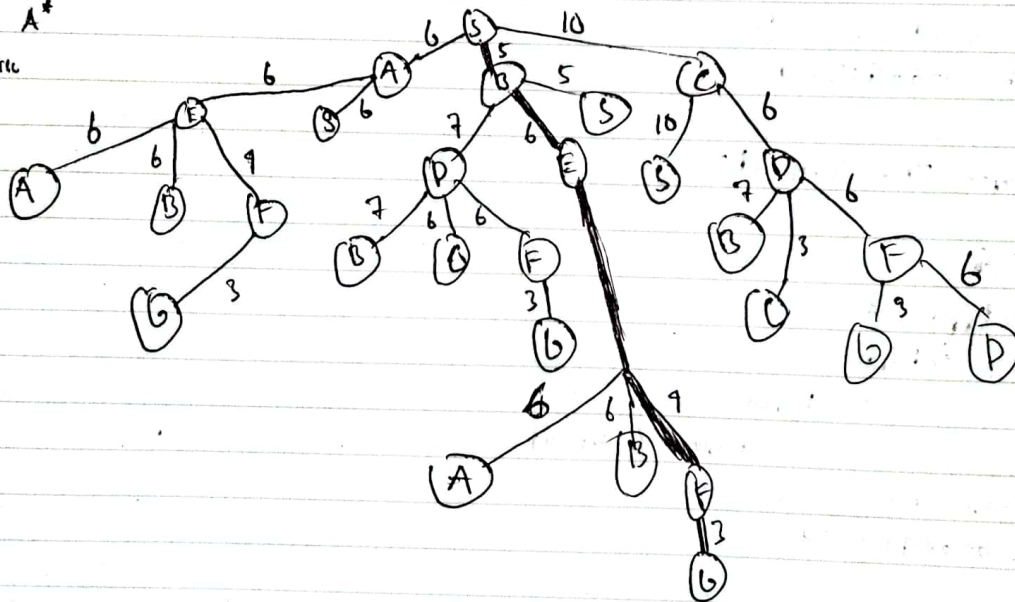
→ Explore G ketemu

* Route : $S \rightarrow B \rightarrow E \rightarrow F \rightarrow G$

* Total cost : $5 + 6 + 9 + 3 = 18$

5. Algoritma A*

* Search Tree



* Route : $S \rightarrow B \rightarrow E \rightarrow F \rightarrow G$

* Total cost : $5 + 6 + 9 + 3 = 18$