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Struktur Data MODUL 6



1. Notasi dari graph diatas (G=, V, E-)

Jawab:

G = , V, E-

V = , A, B, C, D, E, F, G-

E = , (A, B), (B, C), (B, D), (B, E), (C, E), (C, D), (D, A), (D, E), (E, F), (G, D)

1. Jumlah in-degree, jumlah out-degree, dan jumlah edge

Jawab:

In-degree(A) = 1

In-degree(B) = 1

In-degree(C) = 1

In-degree(D) = 3

In-degree(E) = 3

In-degree(F) = 1

In-degree(G) = 0

Out-degree(A) = 1

Out-degree(B) = 3

Out-degree(C) = 2

Out-degree(D) = 2

Out-degree(E) = 1

Out-degree(F) = 0

Out-degree(G) = 1

Jumlah edge = 10

Jumlah In-degree = 10

Jumlah Out-degree = 10

1. Adjacency matriks dari gambar tersebut

Jawab:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | E | F | G |
| A | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| B | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| C | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| D | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| F | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| G | 0 | 0 | 0 | 1 | 0 | 0 | 0 |

1. Tentukan weight pada tiap-tiap node

A,B = 1

B,C = 3

B,E = 1

B,D = 2

C,D = 1

C,E = 4

D,A = 2

D,E = 2

E,F = 3

G,A = 1

Misal dari A ke C maka weight nya itu 4 melalui jalur A,B,C.