A picture containing object, clock

Description automatically generated

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **(a)** | **0** | **1** | **2** | **3** |
| **0** | 0 | 1 | 1 | 1 |
| **1** | 1 | 0 | 0 | 0 |
| **2** | 1 | 0 | 0 | 1 |
| **3** | 1 | 0 | 1 | 0 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **(c)** | **0** | **1** | **2** | **3** |
| **0** |  | 4 | 8 | 5 |
| **1** | 0 |  |  |  |
| **2** | 0 |  |  | 6 |
| **3** | 5 |  | 0 |  |

A close up of a clock

Description automatically generated

A picture containing pair, sitting, hanging, clock

Description automatically generated

Adjacency List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **AL** | **0** | **1** | **2** | **3** | **4** |
| **0** | 1 | 1 |  | 0 | 0 |
| **1** | 0 | 0 |  |  |  |
| **2** |  |  | 0 | 0 |  |
| **3** | 1 |  | 1 | 0 |  |
| **4** |  |  |  |  | 0 |

Transitive Closure

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TC** | **0** | **1** | **2** | **3** | **4** |
| **0** | 1 | 1 | 1 | 1 | 0 |
| **1** | 1 | 1 | 1 | 1 | 0 |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| **4** | 0 | 0 | 0 | 0 | 0 |