**GAURAV NANDA (GN3522) :** [**mailto:gaurav324@gmail.com**](mailto:gaurav324@gmail.com)

**Featured Oriented Programming. (Homework – 1)**

**PART-1**

**Entry Station**

|  |  |  |
| --- | --- | --- |
| EntryStationID# | StationID | IsOperating |

**ATM**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ATM# | CashOnHand | Dispensed | StationID | IsOperating | ConsortiumID# |

**Consortium**

|  |
| --- |
| ConsortiumID# |

**CashierStation**

|  |  |  |  |
| --- | --- | --- | --- |
| CashierStationId# | StationID | IsOperating | BranchID# |

**Branch**

|  |  |
| --- | --- |
| BranchID# | Connected |

**User**

|  |
| --- |
| UserID# |

**PART-2**

**Table-A**

|  |  |  |
| --- | --- | --- |
| A\_ID# | f | B\_ID# |

**Table-B**

|  |  |  |
| --- | --- | --- |
| B\_ID# | h | A\_ID# |

**Yes, i**t is possible for an A instance to have aB instance and a B instance to have no A instance. This is because, it is mentioned in the UML that A can have 0 or 1 instance of B and similarly B can have 0 or 1 instance of A. In our case, A would have 1 and B would have 0.

In that case, sample data would like:

|  |  |  |
| --- | --- | --- |
| **A\_ID#** | **f** | **B\_ID#** |
| a\_1 | a\_f | b\_1 |

|  |  |  |
| --- | --- | --- |
| **B\_ID#** | **H** | **A\_ID#** |
| b\_1 | b\_h | *NULL* |