**Q1:**

**Table 1:**

|  |  |  |  |
| --- | --- | --- | --- |
| **A** | **B** | **C** | **N** |
| 2 | 1 | 1 | 17 |
| 1 | 3 | 3 | 29 |
| 2 | 1 | 3 | 23 |

**Table 2.**

|  |  |  |
| --- | --- | --- |
| **R** | **C** | **M** |
| 1 | A | 2 |
| 1 | B | 1 |
| 1 | C | 1 |
| 1 | N | 17 |
| 2 | A | 1 |
| 2 | B | 3 |
| 2 | C | 3 |
| 2 | N | 29 |
| 3 | A | 2 |
| 3 | B | 1 |
| 3 | C | 3 |
| 3 | N | 23 |

**Q2:**

**Cost Per Area Information added to the table:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **A**  **( Area in 1000 Sqft)** | **B**  **(Number of bathrooms)** | **C**  **(Cost in $100k’s)** | **N**  **(Number of houses fond** | **CPA**  **(Cost per Area = Cost/Area = C/A)** |
| 2 | 1 | 1 | 17 | 50 |
| 1 | 3 | 3 | 29 | 300 |
| 2 | 1 | 3 | 23 | 150 |

**Updated EAV table**

|  |  |  |
| --- | --- | --- |
| **R** | **C** | **M** |
| 1 | A | 2 |
| 1 | B | 1 |
| 1 | C | 1 |
| 1 | N | 17 |
| 2 | A | 1 |
| 2 | B | 3 |
| 2 | C | 3 |
| 2 | N | 29 |
| 3 | A | 2 |
| 3 | B | 1 |
| 3 | C | 3 |
| 3 | N | 23 |
| 1 | CPA | 50 |
| 2 | CPA | 300 |
| 3 | CPA | 150 |

**Q3**

**Q3a:**

SELECT Matrix1.RowID AS RowID, Matrix1.ColumnID AS ColumnID, Matrix1.Value \* 7 AS Value

FROM Matrix1

**Q3b:**

SELECT Matrix2.ColumnID AS RowID, Matrix2.RowID AS ColumnID, Matrix2.Value AS Value

FROM Matrix2