**Textual description for the ‘Calculate Determinant’ use case**

**USE CASE**: Calculate Determinant

**GOAL**: To calculate determinant of matrix

**ACTORS**: User, System

**Main Success Scenario:**

1. User enters the matrix (Enter Matrix Use Case)

2. System calculates the determinant of matrix

3. System displays the results of evaluation

4. User leaves or executes another operation

**Textual description for the ‘Calculate Scalar Multiplication’ use case**

**USE CASE**: Calculate Scalar Multiplication

**GOAL**: To calculate scalar multiplication of matrix and number

**ACTORS**: User, System

**Main Success Scenario:**

1. User enters the matrix (Enter Matrix Use Case)

2. User enters the scalar number

3. System calculates the scalar multiplication of matrix and number

4. System displays the results of evaluation

5. User leaves or executes another operation

**Textual description for the ‘Calculate Matrix Decomposition’ use case**

**USE CASE**: Calculate Matrix Decomposition

**GOAL**: To decompose matrix

**ACTORS**: User, System

**Main Success Scenario:**

1. User selects decomposition type

2. User enters the matrix (Enter Matrix Use Case)

3. System decomposes the matrix

4. System displays the results of evaluation

5. User leaves or executes another operation

**Textual description for the ‘Elevate Matrix’ use case**

**USE CASE**: Elevate Matrix

**GOAL**: To calculate matrix elevation

**ACTORS**: User, System

**Main Success Scenario:**

1. User enters the matrix (Enter Matrix Use Case)

2. User enters the number of elevation

3. System calculates the elevation of matrix

4. System displays the results of evaluation

5. User leaves or executes another operation

**Textual description for the ‘Multiply Matrices’ use case**

**USE CASE**: Multiply Matrices

**GOAL**: To multiply matrices

**ACTORS**: User, System

**Main Success Scenario:**

1. User enters the first matrix (Enter Matrix Use Case)

2. User enters the second matrix (Enter Matrix Use Case)

3. System calculates the multiplication of the matrices

4. System displays the results of evaluation

5. User leaves or executes another operation

**Textual description for the ‘Divide Matrices’ use case**

**USE CASE**: Divide Matrices

**GOAL**: To divide matrices

**ACTORS**: User, System

**Main Success Scenario:**

1. User enters the first matrix (Enter Matrix Use Case)

2. User enters the second matrix (Enter Matrix Use Case)

3. System calculates the division of the matrices

4. System displays the results of evaluation

5. User leaves or executes another operation

**Textual description for the ‘Add Matrices’ use case**

**USE CASE**: Add Matrices

**GOAL**: To add matrices

**ACTORS**: User, System

**Main Success Scenario:**

1. User enters the first matrix (Enter Matrix Use Case)

2. User enters the second matrix (Enter Matrix Use Case)

3. System adds the matrices

4. System displays the results of evaluation

5. User leaves or executes another operation

**Textual description for the ‘Enter Matrix’ use case**

**USE CASE**: Enter Matrix

**GOAL**: To create matrix for the operation

**ACTORS**: User, System

**Main Success Scenario:**

1. User enters the size of matrix

2. User enters the element of matrix

3. System stores the created matrix in memory