

Matrix

T: typename

```
# _row_count: int
# _column_count: int
# _data: std::vector<T>

+ <<explicit>> Matrix(row_count: int = 0, column_count: int = 0)
+ <<const>> operator ()(row: int, column: int): const T&
+ operator ()(row: int, column: int): T&
+ <<const>> rowCount(): int
+ <<const>> columnCount(): int
+ resizeRows(row_count: int): bool
+ resizeColumns(column_count: int): bool
+ setRow(index: int, row: const RowMatrix<T>&): bool
+ setColumn(index: int, column: const ColumnMatrix<T>&): bool
+ <<const>> clone(): Matrix*
<<friend>> operator << <T>(lhs: std::ostream&, rhs: const Matrix<T>&): std::ostream&
<<friend>> operator >> <T>(lhs: std::istream&, rhs: Matrix<T>&): std::istream&
```

ColumnMatrix: public Matrix<T>

T: typename

```
+ <<explicit>> ColumnMatrix(row_count: int = 0)
+ <<const>> operator [] (row: int): const T&
+ operator [] (row: int): T&
+ resizeColumns(column_count: int): bool
+ <<const>> clone(): ColumnMatrix*
```

RowMatrix: public Matrix<T>

T: typename

```
+ <<explicit>> RowMatrix(column_count: int = 0)
+ <<const>> operator [] (column: int): const T&
+ operator [] (column: int): T&
+ resizeRows(column_count: int): bool
+ <<const>> clone(): RowMatrix*
```

TriangularMatrix

T: typename

```
# _row_count: int
# _data: std::vector< std::vector<T> >

+ <<explicit>> TriangularMatrix(row_count: int = 0)
+ <<const>> operator (row: int, column: int): const T&
+ operator (row: int, column: int): T&
+ <<const>> rowCount(): int
+ resizeRows(row_count: int): bool
+ <<const>> clone(): TriangularMatrix*
<<friend>> operator << <T>(lhs: std::ostream&, rhs: const TriangularMatrix<T>&): std::ostream&
<<friend>> operator >> <T>(lhs: std::istream&, rhs: TriangularMatrix<T>&): std::istream&
```