```
Testing Default Constructor...

0 0 0 0
0 0 0 0
0 0 0 0
0 0 0 0
---------------------------------
Testing Parameterized Constructor...

0
0
---------------------------------
Testing Copy Constructor...

First Matrix
1 0 0 0
0 2 0 0
0 0 3 0
0 0 0 4

Second Matrix:
1 0 0 0
0 2 0 0
0 0 3 0
0 0 0 4
---------------------------------
Testing for Number of Rows...

Matrix:
0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0

NumRows: 3
---------------------------------
Testing for Number of Columns...

Matrix:
0 0 0 0 0 0
0 0 0 0 0 0

NumCols: 6
---------------------------------
Testing Grow Columns...

1 0 0 0
0 2 0 0
0 0 3 0 0 0 0 0
0 0 0 4
0 0 0 0 0 0 0 0
```

```
---------------------------------
Testing Grow...

1 0 0 0 0
0 2 0 0 0
0 0 3 0 0
0 0 0 4 0
0 0 0 0 0
---------------------------------
Testing Advanced GrowCol & Grow...


Growcol matrix at row 1 to 8 columns
1 0 0 0
0 2 0 0 0 0 0 0
0 0 3 0
0 0 0 4

Grow matrix to 9x9 after growcols
1 0 0 0 0 0 0 0 0
0 2 0 0 0 0 0 0 0
0 0 3 0 0 0 0 0 0
0 0 0 4 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
---------------------------------
Testing Size...

Matrix:

1 0 0 0 0 0 0 0
0 2 0 0 0 0 0 0
0 0 3 0 0 0 0 0
0 0 0 4 0 0 0 0

Size (# of elements): 32
---------------------------------
Testing At...

Matrix:
185 0 0 0
0 134 0 0
0 0 516 0
0 0 0 380

The number at (1,1) is: 134
The number at (2,2) is: 516
The number at (1,3) is: 0
---------------------------------
```

```
Testing Scalar...

2 0 0 0
0 4 0 0
0 0 6 0
0 0 0 8

6 0 0 0
0 12 0 0
0 0 18 0
0 0 0 24
---------------------------------
Testing Scalar...

Matrix before scalar multiplication:
1 0 0 0
0 2 0 0 0 0 0 0
0 0 3 0
0 0 0 4 0 0 0 0

Matrix after scalar multiplication:
2 0 0 0
0 4 0 0 0 0 0 0
0 0 6 0
0 0 0 8 0 0 0 0

---------------------------------
Testing Matrix Multiplication...

Matrix 1 (Multiplier):
1 2
3 4

Matrix 2 (Multiplier):
5 6
7 8

Matrix 3 (Result):
19 22
43 50

---------------------------------
```