

```
/* Multiplies two int matrices
 *
 * @param m1 First matrix
 * @param m2 Second matrix
 * @return m1 multiplied by m2
 */
```

```
public static int[][] multiply(int[][] m1, int[][] m2)
```

```
int m1rows = m1.length;
int m1cols = m1[0].length;
int m2rows = m2.length;
int m2cols = m2[0].length;
```

```
throw new
IllegalArgumentException("matrices don't
match: "
+ m1cols + " != " + m2rows);
```

Exception

m1cols != m2rows ?

No

```
int[][] result = new int[m1rows][m2cols];
int j = 0;
```

i < m1rows ?

Yes

```
int j = 0
```

j < m2cols ?

No

i++

```
result[i][j] = 0;
```

j++

No

```
int i = 0
```

i < m1rows ?

```
int j = 0
```

j < m2cols ?

No

i++

```
int k = 0
```

k < m1cols ?

No

j++

```
result[i][j] += m1[i][k] * m2[k][j];
```

k++

End

```
Return result;
```