MATRICES PGM:

**package** matrices25;

**public** **class** Matrices {

**public** **static** **int**[][] multiplyMatrices(**int**[][] firstMatrix, **int**[][] secondMatrix, **int** r1, **int** c1, **int** c2)

{

**int**[][] product = **new** **int**[r1][c2];

**for**(**int** i = 0; i < r1; i++)

{

**for** (**int** j = 0; j < c2; j++)

{

**for** (**int** k = 0; k < c1; k++)

{

product[i][j] += firstMatrix[i][k] \* secondMatrix[k][j];

}

}

}

**return** product;

}

**public** **static** **void** displayProduct(**int**[][] product)

{

System.***out***.println("Product of two matrices is: ");

**for**(**int**[] row : product)

{

**for** (**int** column : row)

{

System.***out***.print(column + " ");

}

System.***out***.println();

}

}

**public** **static** **void** main(String[] args)

{

**int** r1 = 2, c1 = 3;

**int** r2 = 3, c2 = 2;

**int**[][] firstMatrix = { {6, -4, 5}, {3, 1, 8} };

**int**[][] secondMatrix = { {4, 6}, {-6, 0}, {0, 8} };

**int**[][] product = *multiplyMatrices*(firstMatrix, secondMatrix, r1, c1, c2);

*displayProduct*(product);

}

}