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| --- |
| package vandana.projects.com; |
|  |  |
|  | public class MultiplyMatrices { |
|  |  |
|  | public static void main(String[] args) { |
|  | int r1 = 2, c1 = 3; |
|  | int r2 = 3, c2 = 2; |
|  | int[][] firstMatrix = { {3, -2, 5}, {3, 0, 4} }; |
|  | int[][] secondMatrix = { {2, 3}, {-9, 0}, {0, 4} }; |
|  | int[][] product = multiplyMatrices(firstMatrix, secondMatrix, r1, c1, c2); |
|  | displayProduct(product); |
|  |  |
|  |  |
|  | } |
|  | 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(); |
|  | } |
|  | } |
|  |  |
|  |  |
|  | } |