public static int diagonalOp(int[][] matA, int[][] matB)

{

int sum = 0;

for(int r = 0; r < matA.length; r++)

{

for(int c = 0; c < matA[0].length; c++)

{

if(r == c)

sum += matA[r][c] \* matB[r][c];

}

}

return sum;

}

public static int[][] expandMatrix(int[][] matA)

{

int[][] expMat = new int[matA.length \* 2][matA[0].length \* 2];

for(int r = 0; r < expMat.length; r++)

{

for(int c = 0; c < expMat[0].length; c++)

{

expMat[r][c] = matA[r / 2][c / 2];

}

}

return expMat;

}