Map (Key, Value list)

{

Var P = Given Matrix with dimensions ixj (I rows and j columns)

Var Q = Given Matrix with dimensions ixj (i rows and j columns)

For i= 1 to m

For j = 1 to n

Emit (P, I, j, P[i][j]); //P[i][j] is the key whereas the value assigned to the key P[i][j] will be the value

For i = 1 to m

For j = 1 to n

Emit (Q, I, j, Q[i][j]); Q[i][j] is the key whereas the value assigned to the key Q[i][j] will be the value

}

//Map will generate the intermediate key value pairs which is fed to reduce function, in this case it will be P[i][j],Q[i][j] and their values for each iteration.

Reduce (Key, Value List)

{

//Create a new array R to store the output which has dimensions ixj (I rows and j columns)

For i= 1 to m

For j = 1 to n

R[i][j] = p[i][j]+Q[i][j]; //Addition of Matrices P and Q and storing the result to R

For i= 1 to m

For j= 1 to n

Emit(R[i][j]);

}