

```

1 // Create three square CSR matrices
2 Type mat(Float,{N,N});
3 Format CSR({Dense, Compressed});
4 TensorVar A(mat,CSR), B(mat,CSR), C(mat,CSR);
5
6 // Compute a sparse matrix multiplication
7 IndexVar i, j, k;
8 IndexExpr mul = B(i, k) * C(k, j);
9 IndexStmt matmul = (A(i, j) = sum(k, mul));
10
11 // Reorder to linear combinations of rows
12 matmul.reorder(k, j);
13
14 // Precompute the mul expression into a row workspace
15 IndexVar jc, jp;
16 Type vec(Float,{N});
17 TensorVar row(vec, Format({dense}));
18 matmul.precompute(mul, {{j,jc,jp}}, row);

```