Subdomain

Mat localA;
Vec localRHS;

Local system matrix and rhs

VecScatter global_to_D;
VecScatter N_to_B;
VecScatter global_to_B;
ISLocalToGlobalMapping mapping;
PetscInt n_neigh;
PetscInt *neigh;
PetscInt *n_shared;
PetscInt **shared;

Scattering contexts from global to local interior nodes, local nodes to local interface nodes and global to local interface nodes. Information about neighbours and what they share