**ni\_add\_fr\_constraints** – this function adds the foreign key constraints between the Node, Edge and Edge\_Geometry tables. The following are parameters to the function:

**Parameters:**

1) table\_prefix –text – the common prefix applied to Node, Edge and Edge\_Geometry table instance (also the network name)

The function adds the following constraints:

1. Foreign Key “…\_Graphs\_GraphID\_frkey” to “GraphID” of Node table, referencing “GraphID” of Graph table – ensures that a node only exists within a graph that exists in the global Graphs table
2. Foreign Key “…\_Edges\_Nodes\_Node\_F\_ID\_frkey” to “Node\_F\_ID” of Edge table, referencing “NodeID” of Node table – ensures that an edge only exists if the corresponding “from” node is stored in the instance Node table.
3. Foreign Key “…\_Edges\_Nodes\_Node\_T\_ID\_frkey” to “Node\_T\_ID” of Edge table, referencing “NodeID” of Node table – ensures that an edge only exists if the corresponding “to” node is stored in the instance Node table.
4. Foreign Key “…Edges\_Edge\_Geometry\_GeomID\_frkey” to “Edge\_GeomID” of Edge table, referencing “GeomID” of Edge\_Geometry table – ensures that an edge can only exist if the corresponding geometry exists.
5. Foreign Key “…Graph\_GraphID\_frkey” to “GraphID” of Edge table, referencing “GraphID” of global Graphs table – ensures that the edges reference a graph that exists in the global Graphs table.

**Returns:**

Boolean (True on success only)

e.g. SELECT \* FROM ni\_add\_fr\_constraints (‘RAIL\_NETWORK’)