

C++ code 2.9.3: Sub-problem (2-9.e): Implementation of `countBoundaryDofs()` → [GitLab](#)

```
2  std::size_t countBoundaryDofs(const If::assemble::DofHandler &dofhandler) {
3      std::shared_ptr<const If::mesh::Mesh> mesh = dofhandler.Mesh();
4      // given an entity, bd_flags(entity) == true, if the entity is on the
5      // boundary
6      If::mesh::utils::AllCodimMeshDataSet<bool> bd_flags(
7          If::mesh::utils::flagEntitiesOnBoundary(mesh));
8      std::size_t no_dofs_on_bd = 0;
9      // Edges and nodes can be on the boundary
10     for (const auto *edge : mesh->Entities(1)) {
11         if (bd_flags(*edge)) {
12             no_dofs_on_bd += dofhandler.NumInteriorDofs(*edge);
13         }
14     }
15     for (const auto *node : mesh->Entities(2)) {
16         if (bd_flags(*node)) {
17             no_dofs_on_bd += dofhandler.NumInteriorDofs(*node);
18         }
19     }
20     return no_dofs_on_bd;
21 }
```