

C++ code 2.7.1: Sub-problem (2-7.a): Implementation of `volumeOfDomain()` → [GitLab](#)

```
2 double volumeOfDomain(const std::shared_ptr<If::mesh::Mesh> mesh_p) {
3     double volume = 0.0;
4     // iterate over all cells (co-dimension = 0)
5     for (const If::mesh::Entity *cell : mesh_p->Entities(0)) {
6         const If::geometry::Geometry *geo_p = cell->Geometry();
7         volume += If::geometry::Volume(*geo_p);
8     }
9
10    return volume;
11 }
```