

C++11 code 3.3.13: Sub-problem (3-3.k): Implementation of `computeL2normLinearFE()`

→ [GitLab](#)

```
2 double computeL2normLinearFE(const If::assemble::DofHandler &dofh,
3                               const Eigen::VectorXd &mu) {
4     double result = 0.0;
5     int N_dofs = dofh.NumDofs();
6     If::assemble::COOMatrix<double> mass_matrix(N_dofs, N_dofs);
7     MassLocalMatrixAssembler my_mat_provider{};
8     If::assemble::AssembleMatrixLocally(0, dofh, dofh, my_mat_provider,
9                                           mass_matrix);
10    const Eigen::SparseMatrix<double> mass_mat = mass_matrix.makeSparse();
11    result = std::sqrt(mu.dot(mass_mat * mu));
12    return result;
13 }
```