

Smart pointers

Implement class Apartment for storing information about rented apartment. The class must contain a `shared_ptr` to House (the class you implemented in an earlier exercise), apartment number, size of the apartment in m^2 and the monthly rent. All data members must be private.

There can be multiple apartments in a house and each apartment has a smart pointer to the house they are in and the pointer can be used to get the address of the apartment. You need to add a member function to House for getting the address.

The apartment class must implement less than operator that compares apartments by monthly rent.

The apartment class must have a member function that prints the apartment information:

- Address and apartment nr
- Size of the apartment
- The monthly rent

Write a program that creates two houses and defines a vector of Apartments. Program adds three apartments of the first house and four apartments of the second house to the vector. Then program sorts the apartments and prints the apartment information on separate lines.