```
 1: #include "LFSR.hpp"
 2:
 3: #define BOOST_TEST_DYN_LINK
 4: #define BOOST_TEST_MODULE Main
 5: #include <boost/test/unit_test.hpp>
 6:
 7: BOOST_AUTO_TEST_CASE(fiveBitsTapAtTwo)
 8: {
 9:
10:   LFSR l("00111", 2);
11:   BOOST_REQUIRE(l.step() == 1);
12:   BOOST_REQUIRE(l.step() == 1);
13:   BOOST_REQUIRE(l.step() == 0);
14:   BOOST_REQUIRE(l.step() == 0);
15:   BOOST_REQUIRE(l.step() == 0);
16:   BOOST_REQUIRE(l.step() == 1);
17:   BOOST_REQUIRE(l.step() == 1);
18:   BOOST_REQUIRE(l.step() == 0);
19:
20:   LFSR l2("00111", 2);
21:   BOOST_REQUIRE(l2.generate(8) == 198);
22: }
```