COEN 244

Tutorial 4

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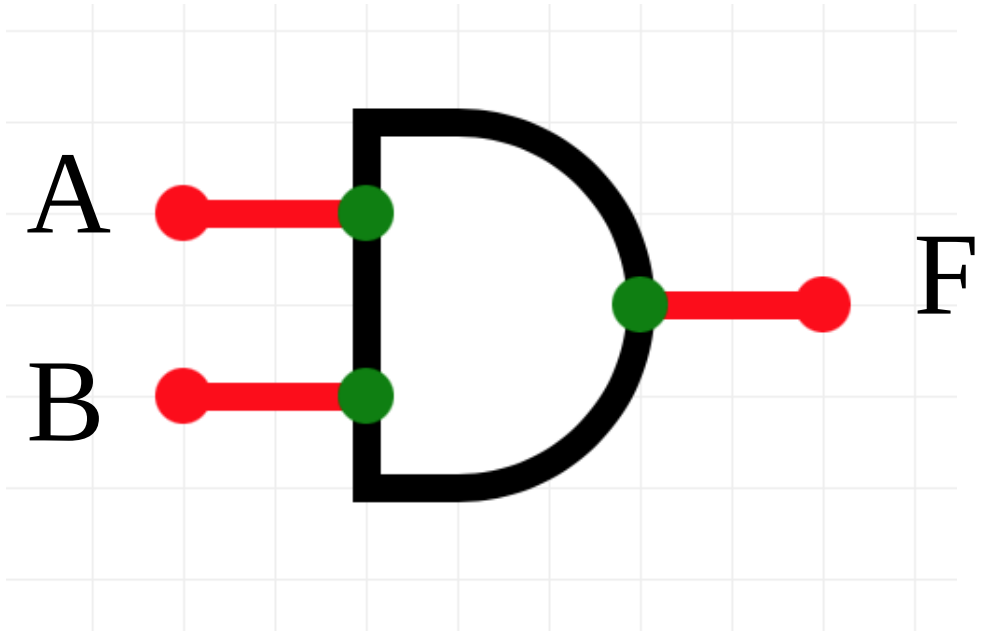
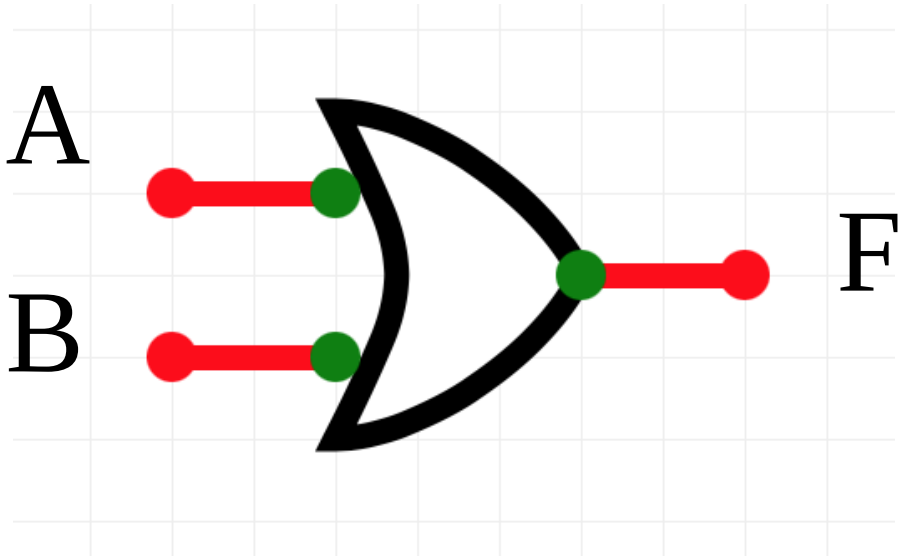
Class Composition

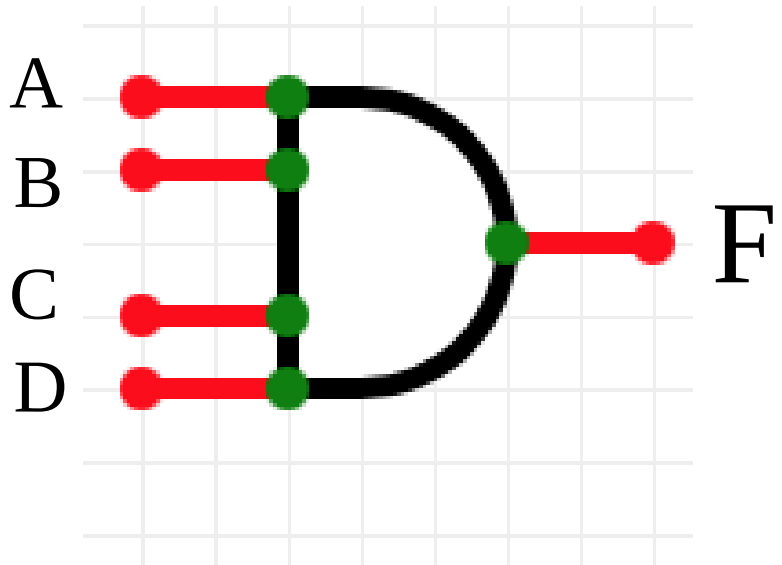
2 Inputs AND gate



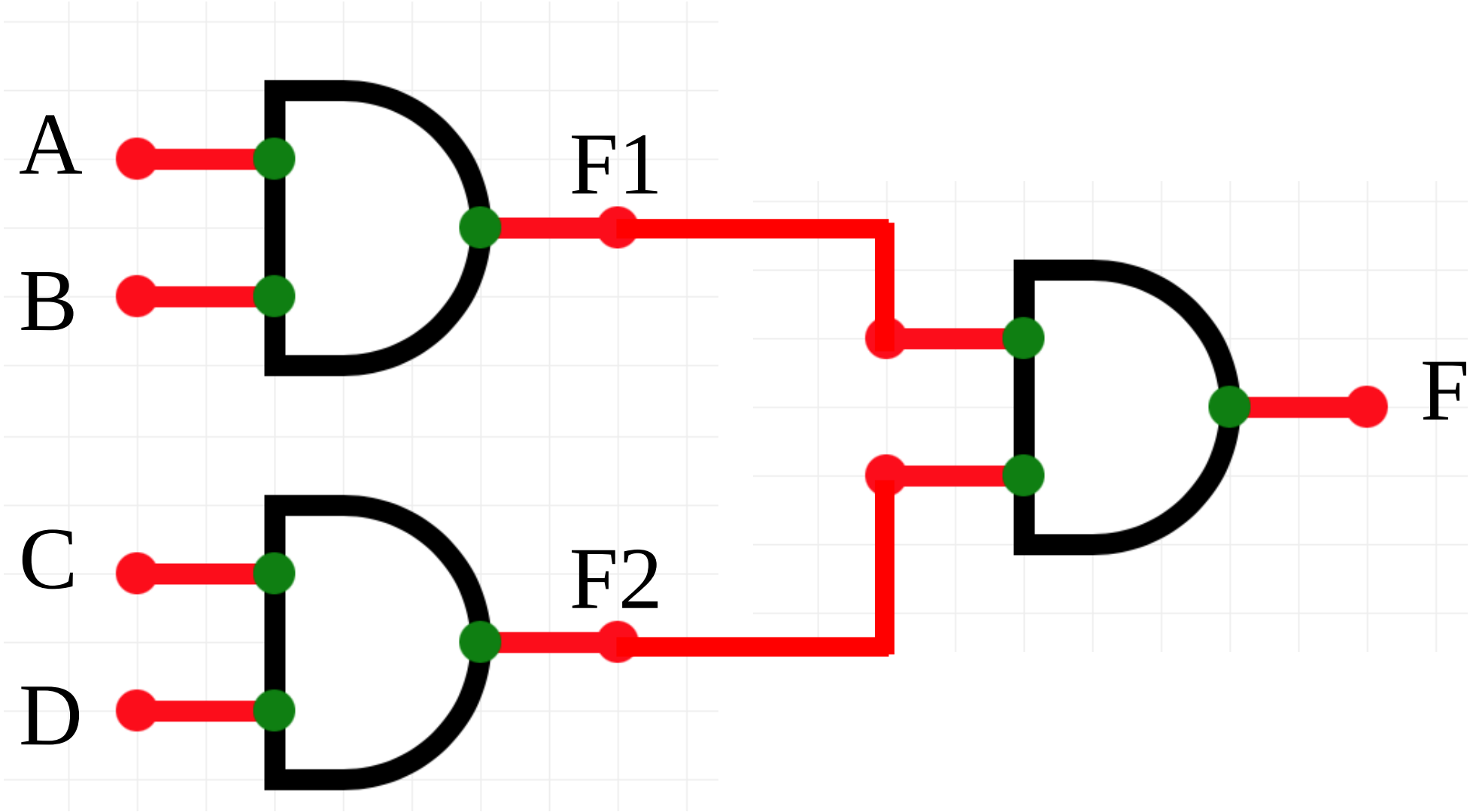
2 Inputs OR gate



4 Inputs AND gate



4 Inputs AND gate

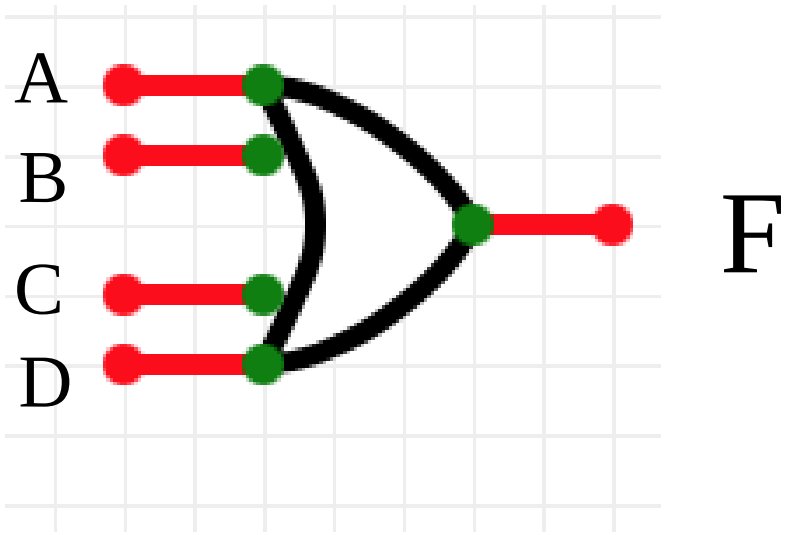


Truth Table

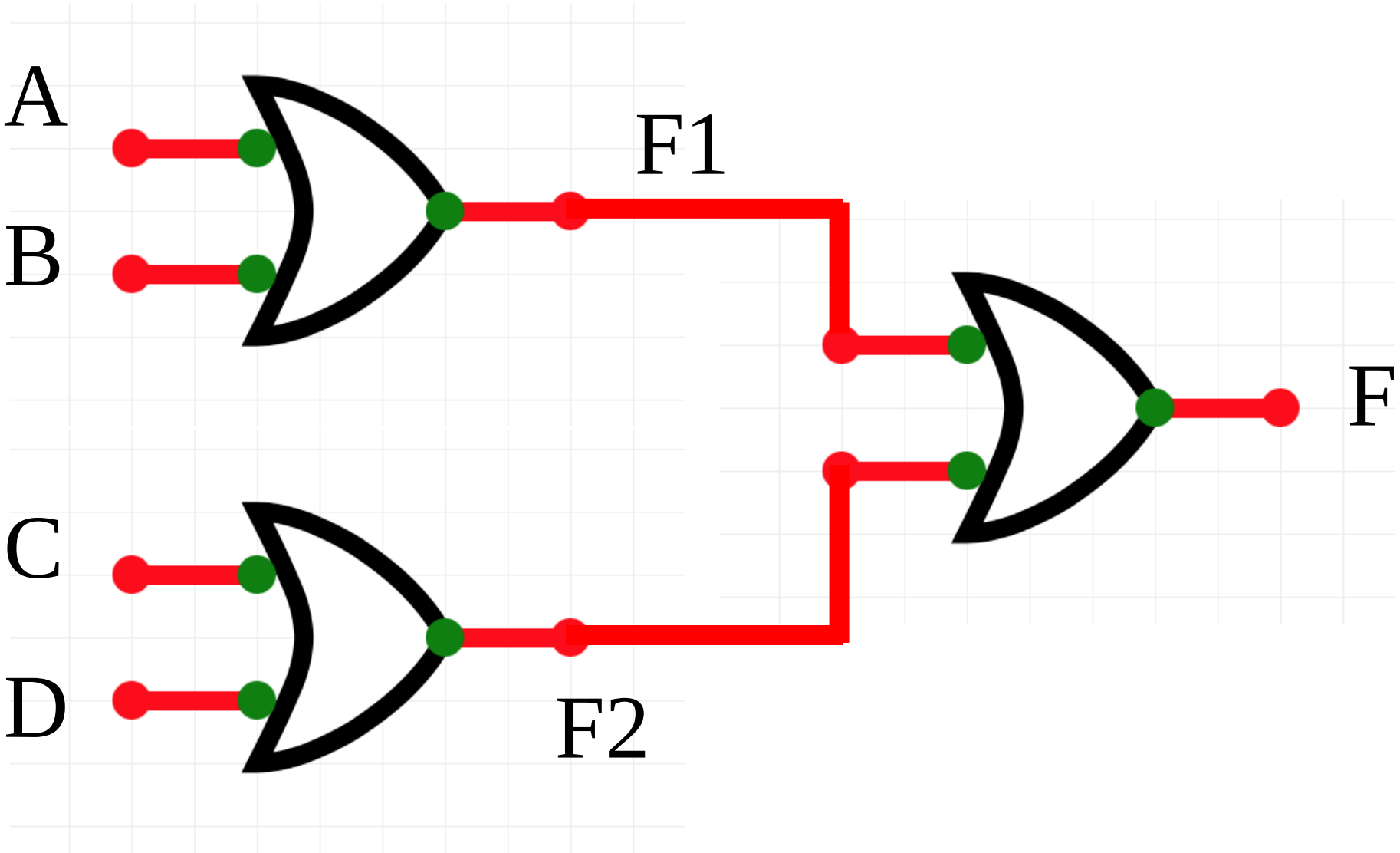
A	B	C	D	F
0	0	0	0	0
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
0	1	0	1	0
0	1	1	0	0
0	1	1	1	0
1	0	0	0	0
1	0	0	1	0
1	0	1	0	0
1	0	1	1	0
1	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	1

```
for (int i = 0; i < 16; i++)
{
   A = (i / 8) % 2;
        B = (i / 4) % 2;
        C = (i / 2) % 2;
        D = (i / 1) % 2;

        setInputs(A, B, C, D);
        F = Evaluate();

        cout << A << "\t" << B << "\t" << C << "\t”
            << D << "\t" << F << endl;
}
```

4 Inputs OR gate



4 Inputs OR gate



4 Inputs Logical Function

F = AB + CD