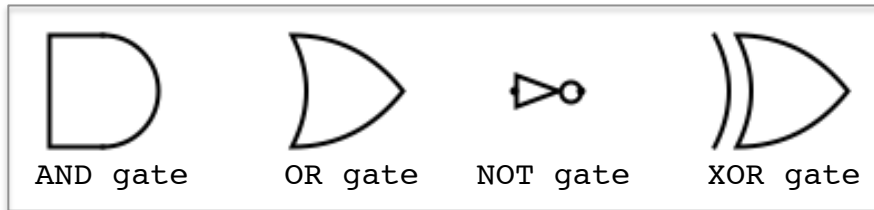


## CSC 2400 – Digital Logic Circuits

**Exercise.** Recall the symbols for the AND, OR, NOT and XOR gates:



Using these gates, build the simple circuit depicted below. **Control**, **A** and **B** are single bit inputs, and **Out** is a single bit output. The circuit should implement the following logic:

```
If (Control == 0)
    Out = A ^ B; /* Exclusive-OR result */
Else
    Out = A & B; /* Bitwise-AND result */
```

