

```
1  module max_min(a, b, maximum, minimum);
2
3  input unsigned [7:0] a; // input number a
4  input unsigned [7:0] b; // input number b
5  output unsigned [7:0] maximum; // greater number output
6  output unsigned [7:0] minimum; // smaller number output
7
8  assign minimum = (a<b) ? a:b; // if a<b, a is the smaller number, otherwise it's b
9  assign maximum = (a>b) ? a:b; // if a>b, a is the bigger number, otherwise it's b
10
11 endmodule
12
```