

```
1  module Deconcatener (
2      input wire[3:0] AddressIn, DataIn, KeypadDataIn,
3
4      output wire[3:0] AddressInUnit, AddressInTens, DataInUnit, DataInTens,
5      KeypadDataInUnit, KeypadDataInTens
6  );
7  assign AddressInUnit = AddressIn % 10;
8  assign AddressInTens = AddressIn / 10;
9
10 assign DataInUnit = DataIn % 10;
11 assign DataInTens = DataIn / 10;
12
13 assign KeypadDataInUnit = KeypadDataIn % 10;
14 assign KeypadDataInTens = KeypadDataIn / 10;
15
16 endmodule
```