4-to-16 decoder is used to activate one of the 16 output lines based on the 4-bit binary number entered into the decoder. Say the number entered is 1010, then the 10th line (lines are numbered from 0 to 15) will get activated.

16-to-4 encoder is used to send the 4-bit binary equivalent of the input line which is activated. Say line 7 is activated (lines are numbered from 0 to 15), then the output binary number will be 0111.