# MULTIPLEXER

**AIM:**

To write the verilog program for multiplexer circuit using the software.

**SOFTWARE REQUIRED:**

- ➤ Amd vivoda 2023.2
- ➤ Simulation tools

**PROGRAM:**

```verilog
module mux(a,b,d,y);

input a,b;

input[3:0]d;

output y;

wire [3:0]w;

assign w[0]=(~a)&(~b)&d[0];

assign w[1]=(~a)&(b)&d[1];

assign w[2]=(a)&(~b)&d[2];

assign w[3]=(a)&(b)&d[3];

assign y=w[0]|w[1]|w[2]|w[3];

endmodule
```