|  |  |  |
| --- | --- | --- |
| **Name: SUNDEEP A** | **SRN: PES1UG20CS445** | **Section: H** |
| **Date: 30-08-21** | **Week Number: 2** |

|  |  |
| --- | --- |
| **1** | 4 to 1 MUX |
|  | **Program:**  module mux2 (input wire i0, i1, j, output wire o);  assign o = (j==0)?i0:i1;  endmodule  module mux4 (input wire [0:3]a, input wire s1, s0, output wire o);  wire p, q;    mux2 m1(a[0], a[1], s0, p);  mux2 m2(a[2], a[3], s0, q);  mux2 m3(p, q, s1, o);  endmodule |
|  | **Output Screenshot:** |
| **2** | 2 to 1 MUX |
|  | **Program:**  module mux2 (input wire a, b, c, output wire o);  assign o = (c==0)?a:b;  endmodule |
|  | **Output Screenshot:** |
| **3** | **4 bit Ripple Carry adder** |
|  | **Program:**  module fulladdR(input wire [3:0] a, b, input wire cin, output wire [3:0] sum, output wire cout);  wire [2:0] c;  fulladd f1(a[0], b[0], cin, sum[0], c[0]);  fulladd f2(a[1], b[1], c[0], sum[1], c[1]);  fulladd f3(a[2], b[2], c[1], sum[2], c[2]);  fulladd f4(a[3], b[3], c[2], sum[3], cout);  endmodule |
|  | **Output Screenshot:** |