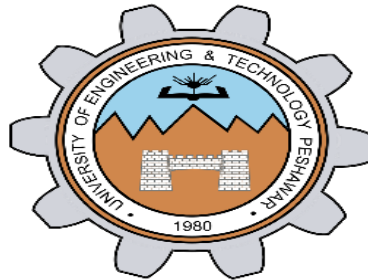


## **Lab report no 8**



**Fall 2021**

**Computer Architecture and organization Lab**

**Submitted By**

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**Section: A**

**Date: 16,2,22**

**Submitted to:**

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### Stim module: -

```
module decoder2x4(A,B,F1,F2,F3,F4);  
input A,B;  
output F1,F2,F3,F4;  
wire nA,nB;  
not n1(nA,A);  
not n2(nB,B);  
and a1(F1,nA,nB);  
and a2(F2,nA,B);  
and a3(F3,A,nB);  
and a4(F4,A,B);  
endmodule
```

### Stim module: -

```
module stim();  
reg A,B;  
wire F1,F2,F3,F4;  
decoder2x4 tr(A,B,F1,F2,F3,F4);  
initial  
begin  
$display ("A B F1 F2 F3 F4");  
  
A=0; B=0;  
#10 $display("%b %b %b %b %b %b",A,B,F1,F2,F3,F4);  
A=0; B=1;  
#10 $display("%b %b %b %b %b %b", A,B,F1,F2,F3,F4);
```

A=1; B=0;

```
#10 $display("%b %b %b %b %b %b", A,B,F1,F2,F3,F4);
```

A=1; B=1;

```
#10 $display("%b %b %b %b %b %b", A,B,F1,F2,F3,F4);
```

end

endmodule

**2x4 decoder: -**

