

Embedded System Design Assignment

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Objective: Progress report of 32-bit processor design.

IF stage code:

```
Module mux(input[31:0]in,  
           input[15:0]branch,  
           input pcsrc,  
           output reg[31:0]out);
```

```
always @(pcsrc)
```

```
begin
```

```
if(pcsrc == 0)
```

```
    out<=in
```

```
else
```

```
    out<= branch;
```

```
end
```

```
endmodule
```

```
////////////////////////////////////
```

```
module add4(input [31:0]in,
```

```
           input reset,
```

```
           output reg[31:0]out);
```

```
always @(*)
```

```
begin
```

```
if(reset)
```