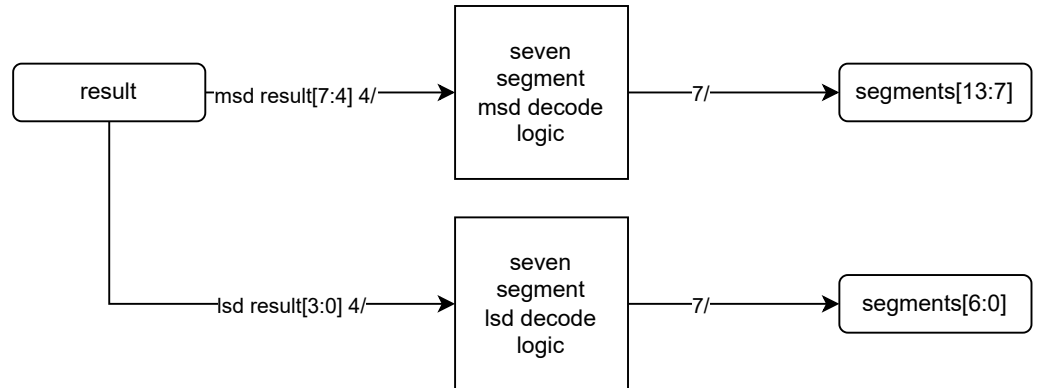


Seven Segment Decode Logic:

```
case(msd)
  4'b0000: begin
    segments[13:7] =
      7'b0111111;
    end
  4'b0001: begin segments[13:7]
    = 7'b0000110;
    end
  4'b0010: begin segments[13:7]
    = 7'b1011011;
    end
  4'b0011: begin segments[13:7]
    = 7'b1001111;
    end
  4'b0100: begin segments[13:7]
    = 7'b1100110;
    end
  4'b0101: begin segments[13:7]
    = 7'b1101101;
    end
  4'b0110: begin segments[13:7]
    = 7'b1111101;
    end
  4'b0111: begin segments[13:7]
    = 7'b0000111;
    end
  4'b1000: begin segments[13:7]
    = 7'b1111111;
    end
  4'b1001: begin segments[13:7]
    = 7'b1101111;
    end
  default: begin segments[13:7] =
    7'b0;
    end
endcase
```



Note: Although the least significant digit is not shown here. The cases are identical