module UI\_datapath

(

input SetX, SetY,

input SetCol,

input GO,

input [8:0] sw,

input done,

output x0, x1, y0, y1,

output color,

output start

);

logic e2, err, err2;

err\_next <= ("0" & dx) + ("0" & dy);  
err2 <= err1 + dx;

err1 <= err + dy;  
e2 <= err(10 downto 0) & "0";  
endmodule