**Polar to Rectangular Converter Project**

**Mid-Progress Report**

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INPUT - The input is given as two 16 bit numbers in either floating point or fixed point configuration for multiplication or addition. The input is given through the switches and is read when any of the operator buttons is pressed.

First input will be the floating point magnitude

Second input will be binary representation of the angle

Center button - Reset

Right button - X value

Left Button - Y value

OUTPUT - The output is displayed on the 7 segment display with each digit denoting 4 bits of the 16 bit output

The outputs are computed and stored after both inputs are read

On pressing right button, we get the X value displayed

On pressing left button, we get the Y value displayed

States - The rightmost LED is on when the system is ready to accept first input - S1

Second LED is on when machine ready to accept second input - S2

Both are on when output has been computed - S3

At reset state, both the LEDs are off - S0

MODULES -

Output display module – Aman/Shivam

Look up table module - Jeetu

Multiplier module - Shivam

Cover module which passes inputs to the calculation modules and outputs to display module - Kartikeya/Jeetu