START

Declare variables, Input/output pins, Display variables

Show distance on display

False

True

Relay for R phase activate

Input from analog pin

Calculate Distance

Input from analog pin

Relay for Y phase activate

Display “ NF ” for no fault

Input to buzzer for two seconds

If distance is greater than zero.

Loop

Calculate Distance

1

2

1

1

2

Loop

True

True

False

False

END

Display “ NF ” for no fault

If distance is greater than zero.

If distance is greater than zero.

Calculate Distance

Show distance on display

Input to buzzer for two seconds

Show distance on display

Input to buzzer for two seconds

Input from analog pin

Relay for B phase activate

Display “ NF ” for no fault