

ResetValues

```
#include <LiquidCrystal_I2C.h>

LiquidCrystal_I2C lcd = LiquidCrystal_I2C(0x27, 16,2);
const byte KEYPAD_BUTTON_NONE = 0;
const byte KEYPAD_BUTTON_SELECT = 1;
const byte KEYPAD_BUTTON_LEFT = 2;
const byte KEYPAD_BUTTON_DOWN = 3;
const byte KEYPAD_BUTTON_UP = 4;
const byte KEYPAD_BUTTON_RIGHT = 5;

const float MAX_VALUE_FOR_KM_PER_HOUR = 999.9;
const int MAX_VALUE_FOR_LAP_COUNT = 99;
const unsigned int MAX_VALUE_FOR_ELAPSED_TIME = 999.9;

float speedKilometersPerHour[2]={95.1, 103.2};
float averageSpeed[2]= {96.6, 102.8};
int lapCount[2] = {4, 3};

void setup(){
    lcd.init();
    lcd.begin(16, 2);
    lcd.clear();
    lcd.backlight();
    displayResults();
}

void loop(){
    if(clearButtonPressed()){
        resetValues();
    }
}

void displayResults(){
    char buffer[6];

    for(byte dir =0; dir<2; dir++){
        if(speedKilometersPerHour[dir]>MAX_VALUE_FOR_KM_PER_HOUR){
            strcpy(buffer, "*****");
        } else{
            dtostrf(averageSpeed[dir],5,1, buffer);
        }
        lcd.setCursor(6,dir);
        lcd.print(buffer);

        if(averageSpeed[dir]>MAX_VALUE_FOR_KM_PER_HOUR){
            strcpy(buffer, "*****");
        }else{
            dtostrf(averageSpeed[dir],5, 1, buffer);
        }
        lcd.setCursor(6, dir);
        lcd.print(buffer);
    }
}
```

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```
if(lapCount[dir]>MAX_VALUE_FOR_LAP_COUNT){
    strcpy(buffer, "**");
}else{
    sprintf(buffer,"%2d", lapCount[dir]);
}
lcd.setCursor(12,dir);
lcd.print(buffer);
}

byte buttonPressedOnKeypad(){
    int inpVal = analogRead(A0);
    if(inpVal<70) return KEYPAD_BUTTON_RIGHT;
    if(inpVal<256) return KEYPAD_BUTTON_UP;
    if(inpVal<440) return KEYPAD_BUTTON_DOWN;
    if(inpVal<670) return KEYPAD_BUTTON_LEFT;
    if(inpVal<900) return KEYPAD_BUTTON_SELECT;
    return KEYPAD_BUTTON_NONE;
}

bool clearButtonPressed(){
    if(buttonPressedOnKeypad()== KEYPAD_BUTTON_SELECT){
        return true;
}else{
    return false;
}
}

void resetValues(){
for(byte dir = 0; dir<2; dir++){
    speedKilometersPerHour[dir]= 0.0;
    averageSpeed[dir]= 0.0;
    lapCount[dir]= 0;
}
displayResults();
}
```