ARM Assignment

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1. **Abstract**:Through this manual, we learn ARM programming using Vaman to interface LCD 16x2 and print SUM on LCD

2. **components**

components	values	quantity
Vaman Board	-	1
LCD	16x2	1
bread board	-	1
jump wires	-	20

TABLE I

- **step 1**:-Connect the 5V pin of the Vaman to an extreme pin of the Breadboard Let this pin be V cc
- **step 2**:-Connect the GND pin of the Vaman to the opposite extreme pin of the Breadboard.
- **step 3**:-plug the LCD in fig.7 to breadboard
- **step 4**:-make the connections of vaman board and LCD according to tableII

TABLE II :Vaman to LCD connections

Pygmy	LCD pins	LCD pin label	LCD pin Description
GND	1	GND	
5V	2	Vcc	
GND	3	Vee	Contrast
10	4	RS	Register Select
GND	5	R/W	read/write
9	6	EN	Enable
14	11	DB4	Serial connection
13	12	DB5	Serial connection
12	13	DB6	Serial connection
11	14	DB7	Serial connection
5V	15	LED+	Backlight
GND	16	LED-	Backlight

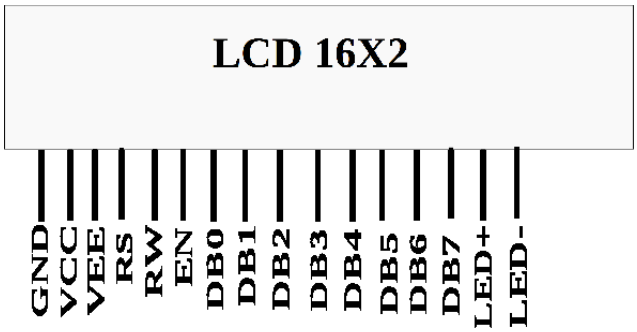

Figure 1: LCD 16X2

Software

Make the connections and connect the Vaman board to the PC via USB. In the location of choice, type the below commands

```
svncohttps://github.com/kkousar/KOUSAR_FWC/
tree/main/arm/LCD
```

1. $cdLCD/GCC_Project$
2. $make$
3. $cd../../$
4. $bashscp\_send.shGCC_project$