TE A – 17

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Assignment No : 3

Aim : Study of connectivity & configuration of Raspberry Pi / Beagle board circuit with basic peripherals LED's vendor standing GPIO & its use in the program

Theory :

Connectivity & configuration of Raspberry Pi

Guides to configure Raspberry Pi

(1) Connectivity of Raspberry-Pi :-

Connectivity is truely superb for a such tiny device especially on the B version of Raspberry Pi. These are 2 USB 2.0 port that can be used to look up peripherals or adoptees & this can be together expanded with a powered hub.

(2) GPO mode :-

The GPIO BOARD option specifies that you are referring to the pins by the "Broadcom kernel number, these are the numbers after "GPIO" in the green rectangle around the outsides of below dia

- The model B+ uses the same numbering as the model "B r2.0 & adds new four pins (27-40)
- The Raspberry Pi zero, Pi 2B & Pi 3B use the same numbering as the B+

(3) Building the circuit :-

In the circuit shown below, two momentary switches one wired to GPIO pins 25 & 24 (16 & 18 on board) The switch on pin 25 is tied to 3.3v while the switch on pin 24 is tied to ground.

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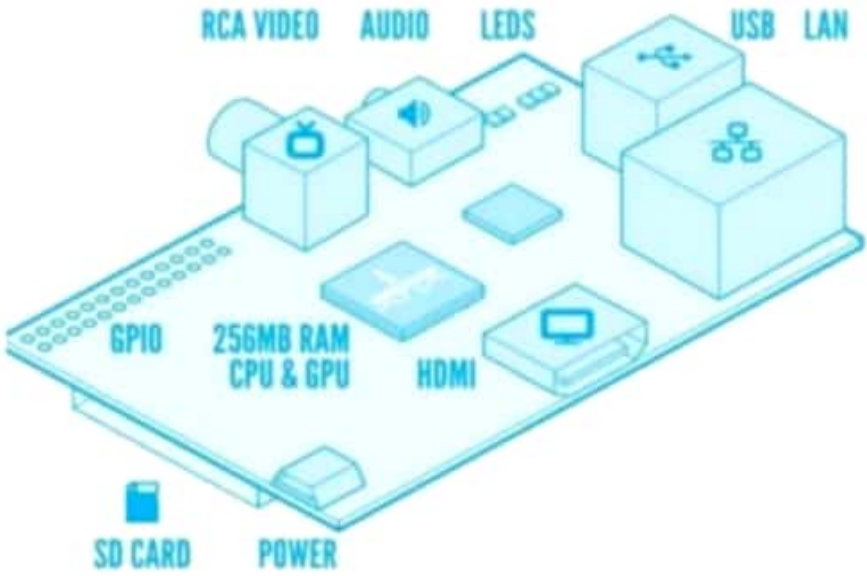

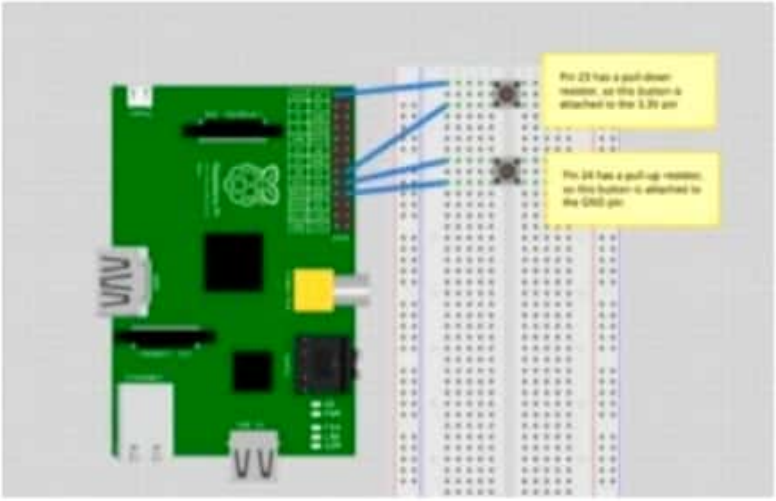

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④ Register :-
You must always use registors to connect LED's upto GPIO pins of Raspberry Pi. The Raspberry Pi can only supply small current (about 60 MA) The LED's will want to draw more & if allowed so they will burn out Raspberry Pi

⑤ Jumper wires :-
They are used in bread board to jump from one connection to other
- The ones you will be using in this ~~cut~~ circuit have diff. connectors on each end
- the end with pin will go into Breadboard

Conclusion :-
Thus, we have studied connectivity & configuration of Raspberry Pi and also use of GPIO

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