## **BUTTON**

- INTERMEDIARY BETWEEN HUMANS AND COMPUTERS
- REPRESENTS A REQUEST WHICH A COMPUTERS SYSTEM UNDERSTAND



- IT IS KNOWN AS A INPUT TO THE COMPUTER SYSTEM
- THE COMPUTER SYSTEM UPON RECEIPT OF THE INPUT CARRIES OUT THE TASK REPRESENTED BY THE INPUT
- PRESSING 8 − MEANS SEND ME TO THE 8<sup>TH</sup>
   FLOOR
- LEARN HOW TO PUT A TASK BEHIND A BUTTON

Refer to Pedestrian Crossing Handout (VIDEO)

Example 1: Using Button

ex1.py

## #importing libraries

from gpiozero import LED, Buzzer,Button from time import sleep from signal import pause

## #give name to components - variables

```
red_led=LED(14)
green_led=LED(18)
buzz = Buzzer(25)
pc_button = Button(24)
```

## #logic of program

```
pc_button.when_pressed = red_led.on
pc_button.when_released = red_led.off
pause()
```

```
Example 2 – Logic for Pedestrian Crossing
ex2.py
#importing libraries
from gpiozero import LED, Buzzer, Button
from time import sleep
from signal import pause
#give name to components - variables
red led=LED(14)
green led=LED(18)
buzz = Buzzer(25)
pc_button = Button(24)
#Logic of Program
red led.on()
while True:
  sleep(10)
  red_led.off()
  green_led.on()
  sleep(15)
  green_led.blink(on_time=.5, off_time=.5, n=5)
  sleep(5)
  green_led.off()
  red led.on()
```

```
Example 2 – Function Ex3.py
#importing libraries
from gpiozero import LED, Buzzer, Button
from time import sleep
from signal import pause
#give name to components - variables
red led=LED(14)
green_led=LED(18)
buzz = Buzzer(25)
pc button = Button(24)
#Functions
def greenman():
  sleep(10)
  red_led.off()
  green_led.on()
  sleep(15)
  green_led.blink(on_time=.5, off_time=.5, n=5)
  sleep(5)
  green_led.off()
  red led.on()
#Logic of Program
red_led.on()
while True:
  greenman()
```

```
Example 4: Using Button <u>Ex4.py</u>
#importing libraries
from gpiozero import LED, Buzzer, Button
from time import sleep
from signal import pause
#give name to components - variables
red led=LED(14)
green_led=LED(18)
buzz = Buzzer(25)
pc button = Button(24)
red led.on()
#Functions
def greenman():
  sleep(10)rt
  red_led.off()
  green_led.on()
  sleep(15)
  green led.blink(on time=.5, off time=.5, n=5)
  sleep(5)
  green led.off()
  red_led.on()
#logic of program
pc_button.when_pressed = greenman
pause()
```