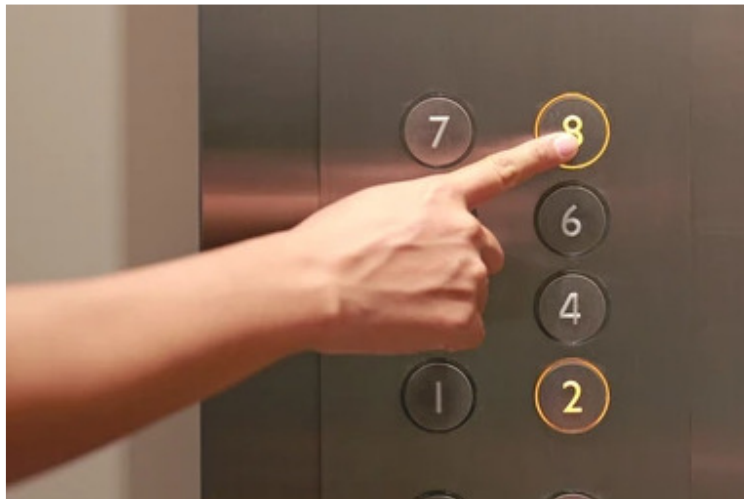


BUTTON

- 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 8TH 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 3 – 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 Ex4.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()
```

```
pc_button.when_pressed = greenman
```

```
pause()
```

