Date :- 30/5/20

Course :- Logic design

topic :- Application of PLC

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Sem & : 6th B Sec

* A PLC (programmable logic controller) is an ruggedized computer used for industrial automation. There contain automate a specific process, machine function, or even an entire production line.
* Working contains → I/O
  → Communication
  → HMI
* Different types of PLC

  In addition to PLC described above, there are variations including PLC + HMI controllers
* Different Application of Relays.
* A CPU of the PLC executes two different programs:
  1) The operating system
  2) The user Program
* Ladder Logic PLC programming

  Among several programming languages ladder logic diagram is the most basic and simplest form of programming the PLC.
* Before to program the PLC with this language, one should know the basic information about it.
* In addition to above functional symbols, there are several functions like timer, counter, PID etc.

Date:- 30/5/20
Course:- Python
Topic:- Vedio & image semester

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* Codes for loding Display, Resizing & Writing images:-

```
import cv2
img = cv2.imread ("galaxy.jpg",0)
Print (type (img))
print (img)
print (img.shape)
print (img.ndim)
resized_image = cv2.resize (img.shape [1]/2)(img.
                                    shap [0]/2))
cv2.imshow ("Galaxy", resized_image)
cv2.imwrite ("Galaxy-resized.jpg", resized_image)
cv2.waitkey (0)
cv2.destroy All windows()
```

* I also learnt to write the code for face Detections which is similar to the above code.

* Vedio capaturing :code:-

```
import cv2.time
a = 0
while True:
    a = a+1
    check, frame = vedio.read()
    print (check)
```

```
print (frame)
gray = cv2 . cvt color (frame, cv2 . COLOUR_BGR2GRAY)
# time . sleep (3)
 cv2 . imshow ("capturing" . gray)
 key = cv2 . wait key (1)
if key == ord ('q'):
break
print(a)
vedio . relese ()
cv 2 . destroy All windows
```