Example2: CCTV Intrusion Detection

Example 2 is a sample program that shows its utility for detecting intrusion through a door. The head of the door consists of CCTV which constantly feeds the program with images. Any change from normal behaviour is considered as an intrusion and alarm is raised.

Actually the footage has to be taken from a camera, using the below code

```
cam=Camera()
while(1):
    new_image=cam.getImage()
    check_diff(base_image,new_image)
```

For the sake of demonstration a series of CCTV Images is passed to the program and do the computation

This program uses a base footage image which is idle situation where there is no intrusion happening through the door this considered as "base_footage"



The a series of new images are be captured with CCTV considered as "new_image" and matched with the base_footage. Whenever there is a deviation detected in the new_image, an alarm is triggered.



It detects that there is an intrusion in its frame 5 so triggers an alarm, outputs message

Trigger Alarm --Intrusion detected in 5 Frame