6. Size: 20 x 25 x 9mm
7. Weight 3g
8. Fully Compatible with many Raspberry Pi cases

☞ **Procedure**

1. Locate the camera port and connect the camera:
2. Start up the Pi.
3. Open the Raspberry Pi Configuration Tool from the main menu.
4. Ensure the camera software is enabled. If it's not enabled, enable it and reboot your Pi to begin.

**Code**

```
from time import sleep
from picamera import PiCamera
camera = PiCamera()
camera.resolution = (1280, 720) camera.start_preview()
sleep(2)
camera.capture('/home/pi/Pictures/newImage.jpg')
camera.stop_preview()
```

☞ **Output**

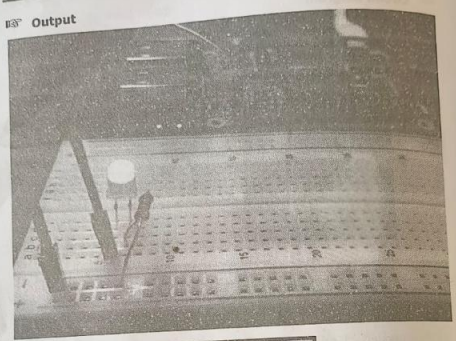
## Practical 5

**AIM : GPIO: Program the 8x8 LED Grid Module**

☞ **Apparatus**

1. 8x8 LED matrix module
2. 7219 driver board
3. Connecting wires

☞ **Output**



## Practical 4

**AIM : Camera Connection and capturing Images**

**Apparatus**

Camera Module

☞ **Theory**

- The Raspberry Pi Camera Board plugs directly into the CSI connector on the Raspberry Pi. The camera is supported in the latest version of Raspbian, the Raspberry Pi's preferred operating system.
- The Raspberry Pi Camera Board Features:

1. Fully Compatible with Both the Model A and Model B Raspberry Pi
2. 5MP Omnivision 5647 Camera Module
3. Still Picture Resolution: 2592 x 1944
4. Video: Supports 1080p @ 30fps, 720p @ 60fps and 640x480p 60/90 Recording
5. 15-pin MIPI Camera Serial Interface – Plugs Directly into the Raspberry Pi Board