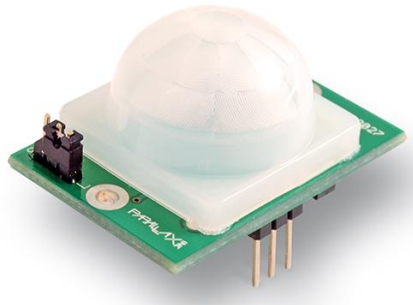
PIR INTERFACE WITH ARDUINO



MOTION DETECTION OF LIVING OBJECTS USING PIR SENSOR USING ARDUINO.

PIR (PASSIVE INFRARED)

- PIR sensor is used for detecting infrared heat radiations. This makes them useful in applications involving detection of moving living objects that emit infrared heat radiations.
- The output of PIR sensor is high when it senses motion; whereas it is low when there is no motion (stationary object or no object).

- Assignment:

Motion detection of living objects using PIR sensor using Arduino.

```
const int pir = 4;        /* PIR sensor O/P pin */
void setup()
{
 pinMode(pir, INPUT);
Serial.begin(9600); /* Define baud rate for serial communication */
delay(20000); }
void loop()
{ int sensor_output;
sensor_output = digitalRead(pir);
if( sensor_output == LOW )
 {Serial.print("No object in sight\n\n"); delay(1000); }
else
{ Serial.print("Object detected\n\n");
delay(1000); } }
```

ARRAY

- An array is a consecutive group of memory locations that are of the same type.
- An array is a collection of variables that are accessed with an index number.

Examples to declare array:

- Arrays occupy space in memory. To specify the type of the elements and the number of elements required by an array, use a declaration of the form

```
int marks[6];

int marks[]= {72, 54, 78, 82};

char message[6]="Hello";

char message[6]={'H', 'e', 'l', 'l', 'o'};
```

- To assign a value to an array:

marks[0]=72;

- **To retrieve a value from an array:**
- To refer to a particular location or element in the array, we specify the name of the array and the position number of the particular element in the array.

x= marks[3];

- For loop and array

```
for(int i=2; i<6;i++)
{
pinMode(i, OUTPUT);
}
```