EXPERIMENT NUMBER-1.2

NAME OF EXPERIMENT: Design a cloud based weather monitoring system using IOT platform and relevant sensors.

NAME	UID	SECTION/GROUP
SUJOY ROY	22BCS12022	115/B
PARVEENKUMAR	22BCS15865	115/B
DEEPAK KUMAR SINGH	22BCS12849	115/B
ALOK KUMAR YADAV	22BCS13070	115/B
DEEPANSHU	22BCS15133	115/B

AIM OF THE PRACTICAL

TOOLS USED :

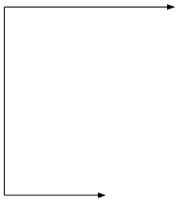
Basic code and command description

Esp32: It is a series of low cost lowpower system on a chipmicrocontroller with integrated wifi and dual mode bluetooth . Can provide wifi and bluetoot hand functionality through it SDIO/SPIorI2C/UARIinterface.

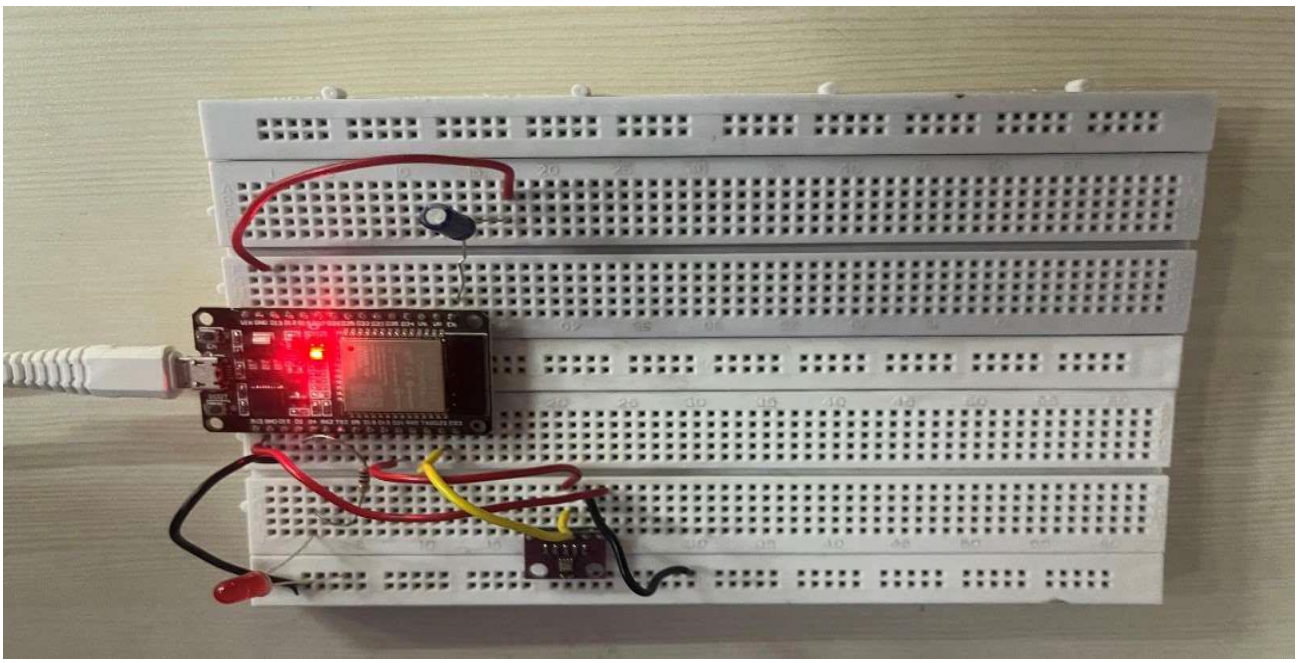
BMP 280: It is a digital pressure sensor,which gives temperature in degrees centigrade and pressure in pa. The output are digital because pressure changes with altitude, with great precision , low energy consuption and an ultra compact format.

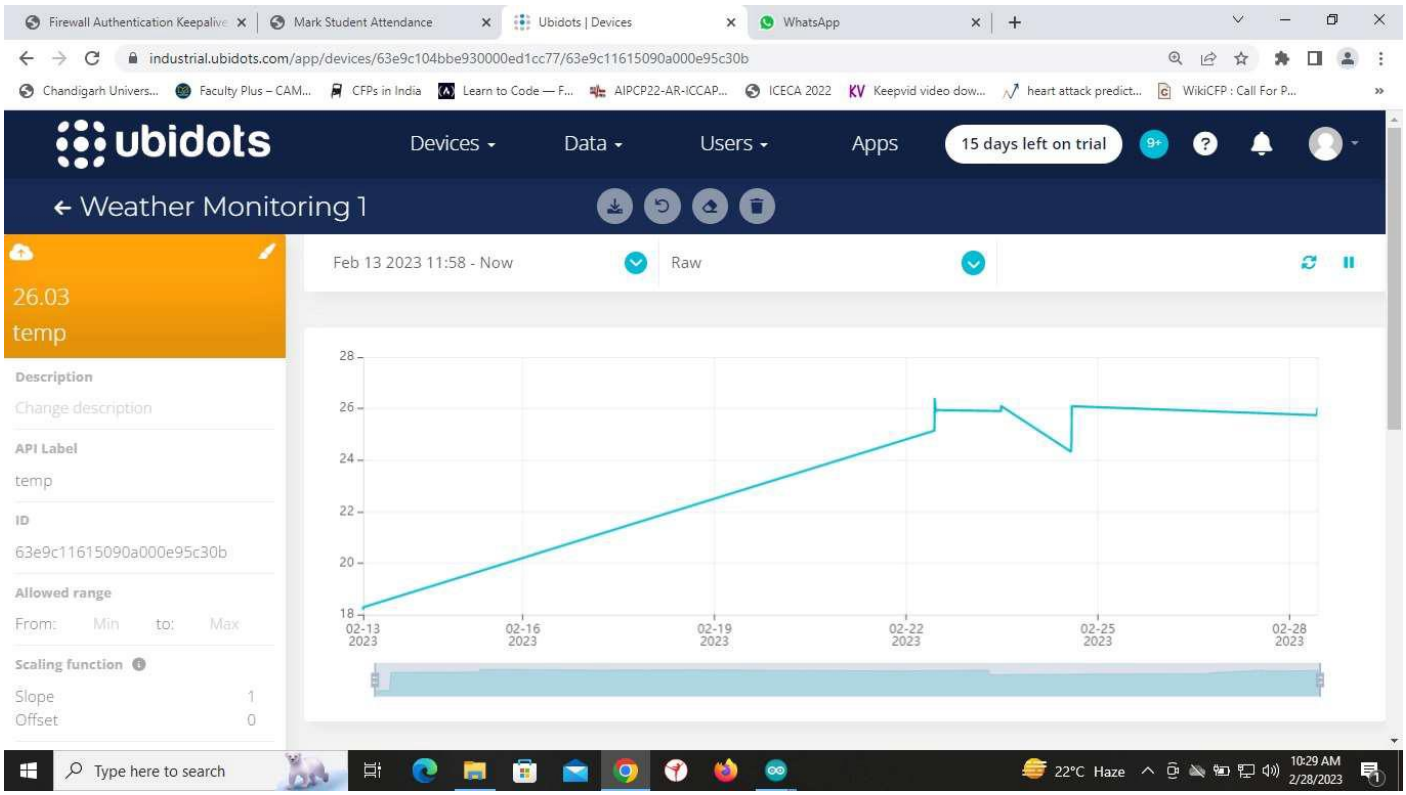
UBIDOTS: It is a virtual representation of a data source or simply, an asset taking sensor data and transmitting said data through a connection protocol to ubidots cloud.

FLOWCHART-



PROGRAM CODE-




Firewall Authentication Keepalive
Mark Student Attendance
Ubidots | Devices
WhatsApp
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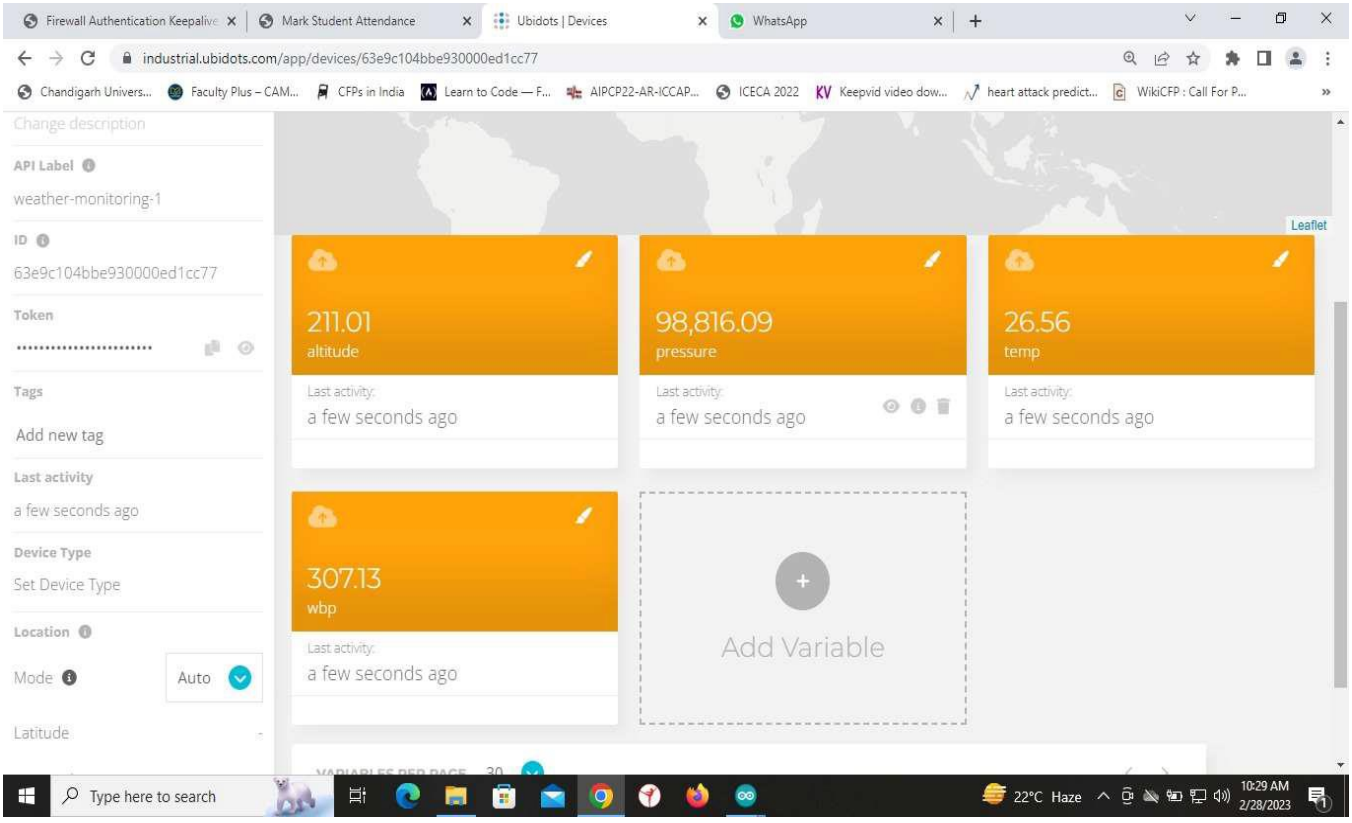
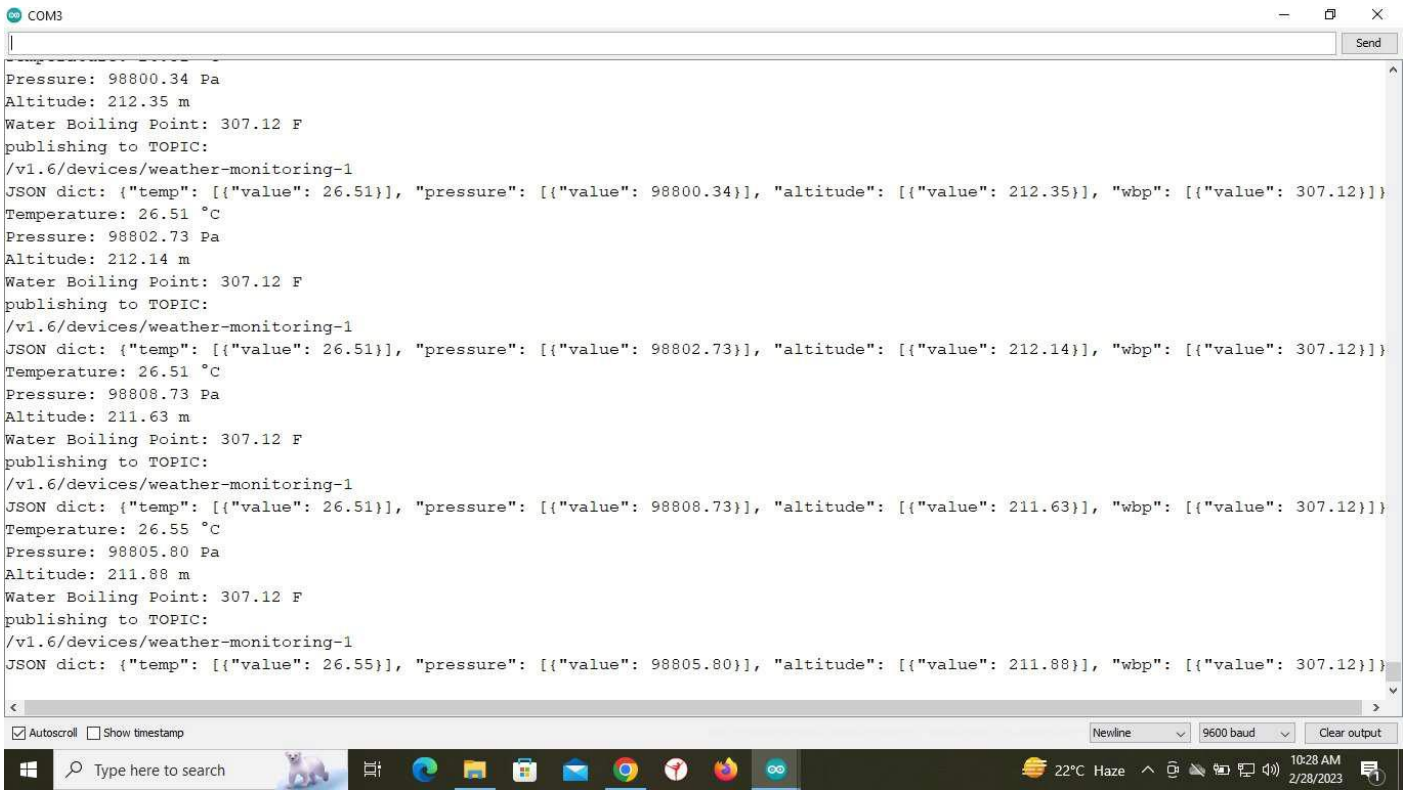
ubidots
Devices
Data
Users
Apps
15 days left on trial
Weather Monitoring 1
26.03
temp
Description
Change description
API Label
temp
ID
63e9c11615090a000e95c30b
Allowed range
From: Min to: Max
Scaling function
Slope 1
Offset 0
Feb 13 2023 11:58 - Now
Raw
28
26
24
22
20
18
02-13 2023
02-16 2023
02-19 2023
02-22 2023
02-25 2023
02-28 2023
Type here to search
22°C Haze
10:29 AM
2/28/2023


Firewall Authentication Keepalive
Mark Student Attendance
Ubidots | Devices
WhatsApp
industrial.ubidots.com/app/devices/63e9c104bbe930000ed1cc77
Change description
API Label
weather-monitoring-1
ID
63e9c104bbe930000ed1cc77
Token
Tags
Add new tag
Last activity
a few seconds ago
Device Type
Set Device Type
Location
Mode
Auto
Latitude
Leaflet
211.01
altitude
Last activity:
a few seconds ago
98,816.09
pressure
Last activity:
a few seconds ago
26.56
temp
Last activity:
a few seconds ago
307.13
wbp
Last activity:
a few seconds ago
Add Variable
Type here to search
22°C Haze
10:29 AM
2/28/2023



Result and summary-

EVALUATION COLUMN(To be filled by Concerned faculty only)

Sr.No.	Parameters	Maximum Marks	Marks Obtained
1.	WorksheetCompletion	10	
2.	Viva	8	
3.	Conduct	12	
	TotalMarks	30	