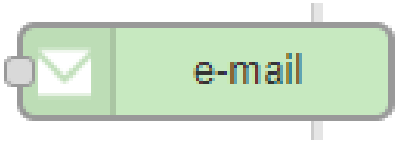
Email Node

Lab 7

Email Node

- To send and receive simple emails
  - Input node
  - Output node

Input



- Gets emails from IMAP or POP3 and forwarded as messages
- The message has
  - Msg.topic : subject of the mail
  - Msg.payload : plain text body
  - Msg.html : text/html
  - Msg.from : from mail
  - Msg.date : date
  - Msg.header : complete header including to,CC.
- Uses imap npm module

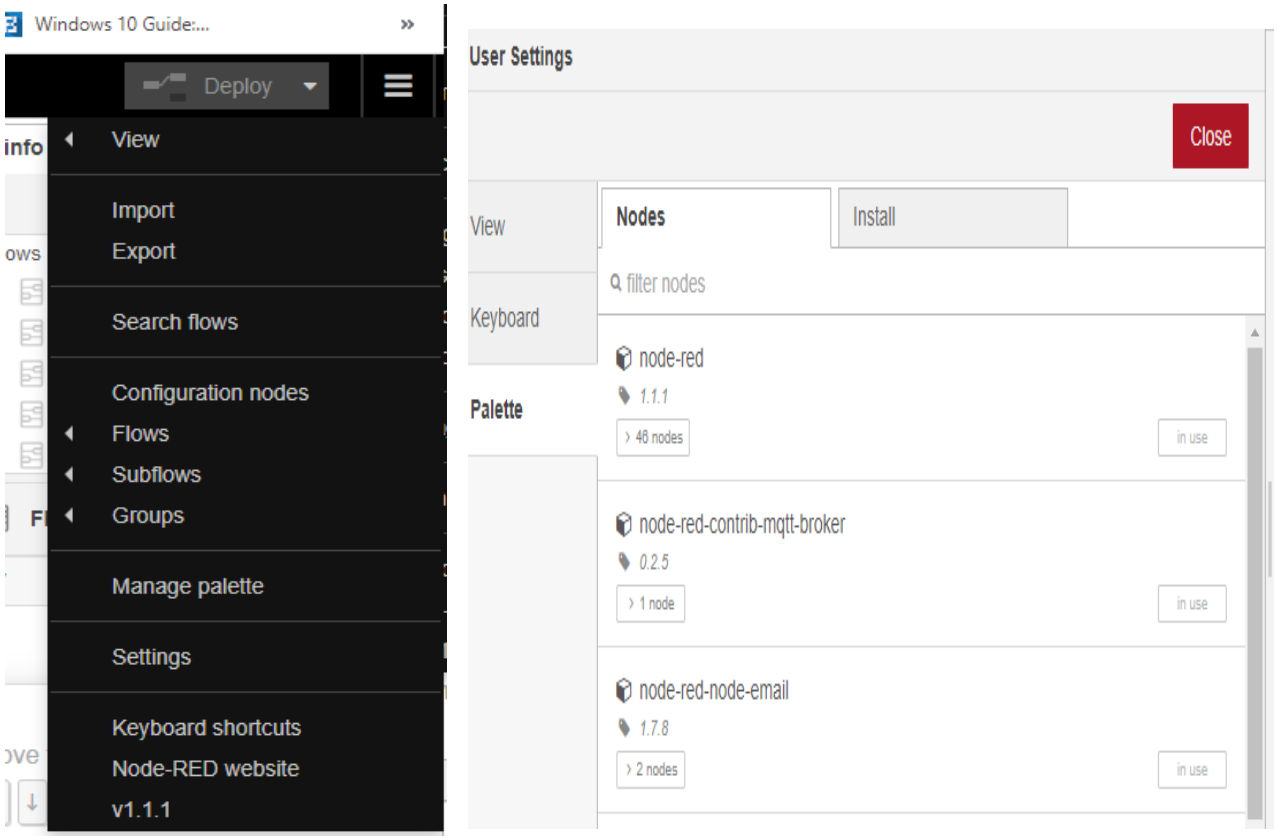
Output

- Sends a message to the given email ID
- The message has
  - Msg.payload : the data as an email.
  - Msg.topic : subject
  - Msg.to
  - msg.from
  - Msg.filename
  - Msg.description : for the body text
  - Msg.attachments
- Uses nodemailer npm module.

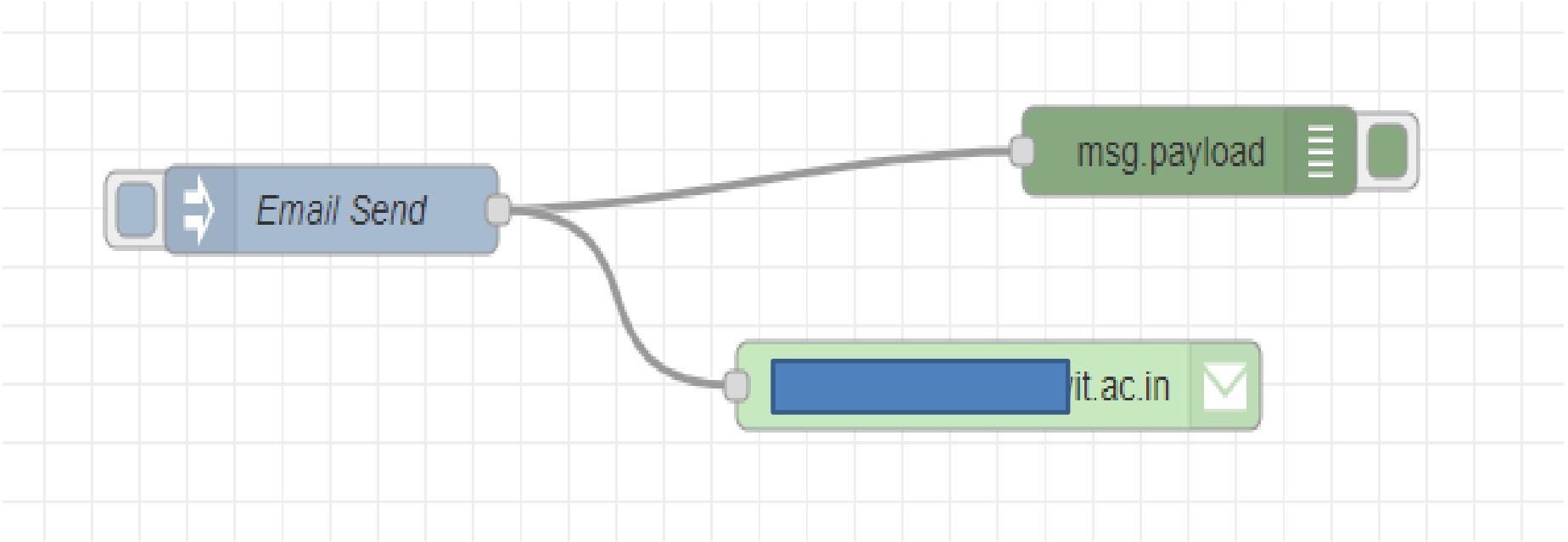
Install email node

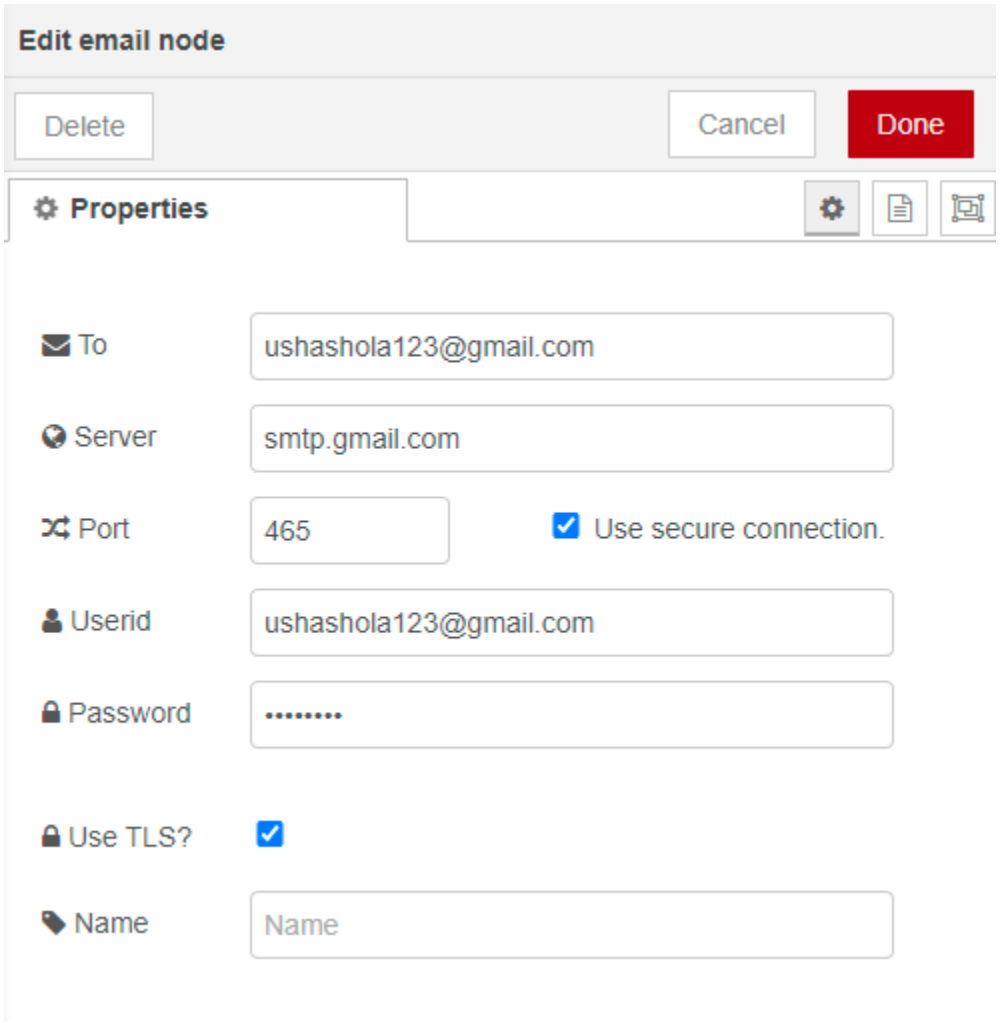
- npm install node-red-node-email.
- Or

```
cd ~/.node-red
npm i node-red-node-email
```



Sample Flow




Edit email node
Delete
Cancel
Done
Properties
To
ushashola123@gmail.com
Server
smtp.gmail.com
Port
465
Use secure connection.
Userid
ushashola123@gmail.com
Password
••••••••
Use TLS?
Name
Name

Error

7/28/2020, 7:05:16 PM node:

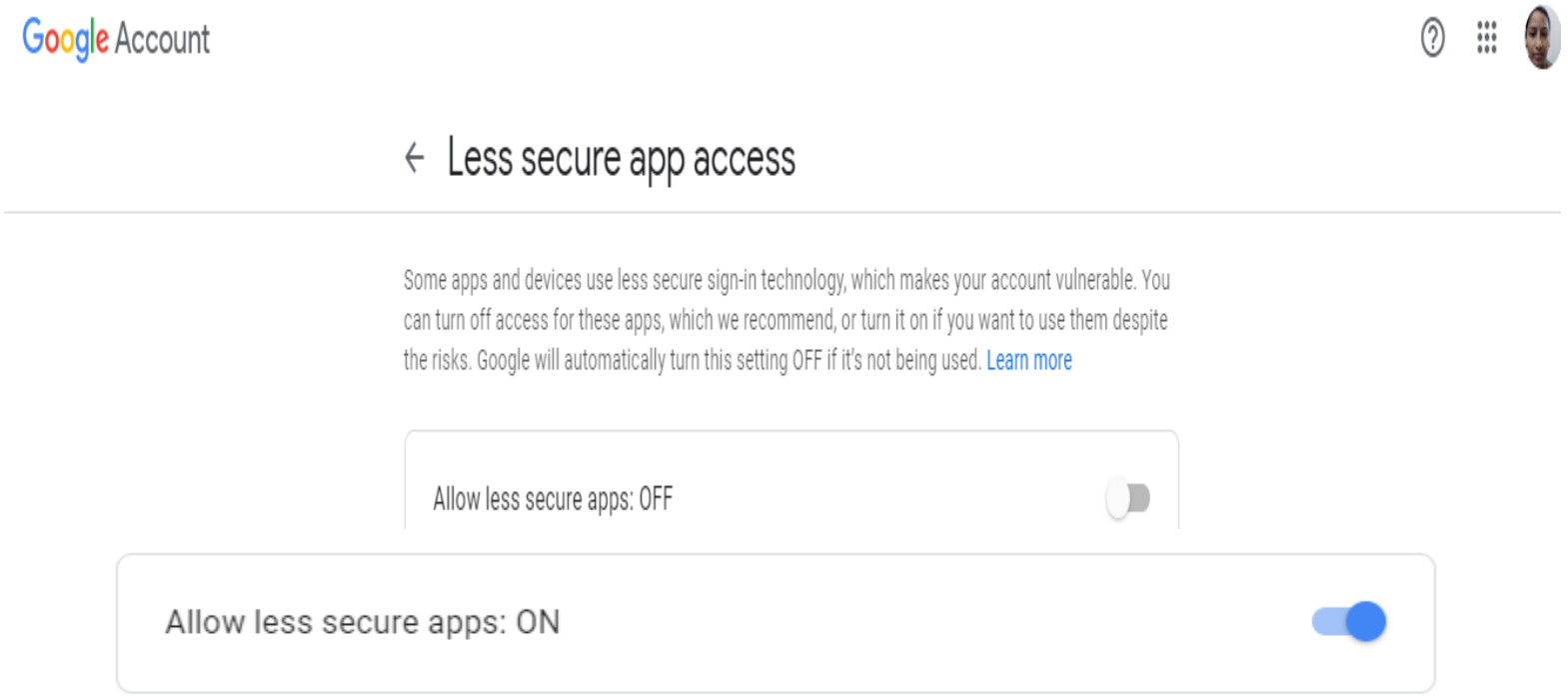
sholausha.rani@vit.ac.in

msg : error

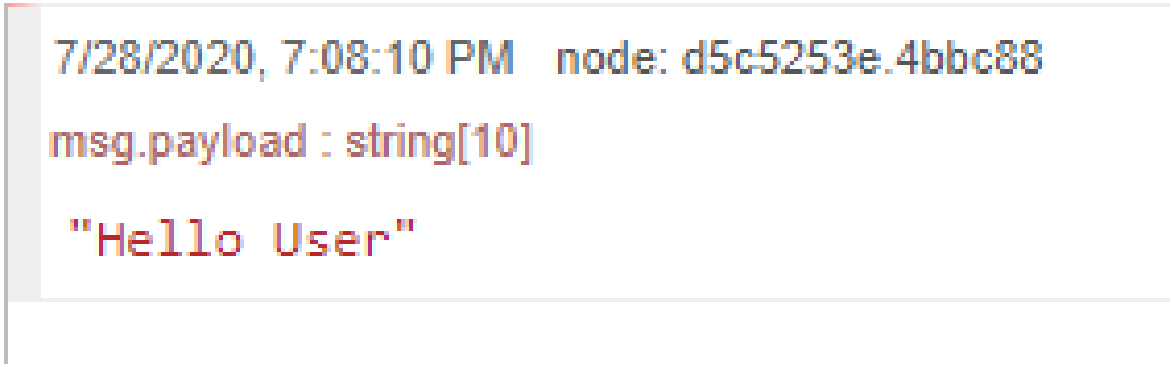
"Error: Invalid login: 535-5.7.8 Username and Password not accepted. Learn more at↵535 5.7.8 https://support.google.com/mail/?p=BadCredentials 15sm3217853pjs.8 - gsmtp"

Authentication failed

- https://serverfault.com/questions/635139/how-to-fix-send-mail-authorization-failed-534-5-7-14



Success of email sent

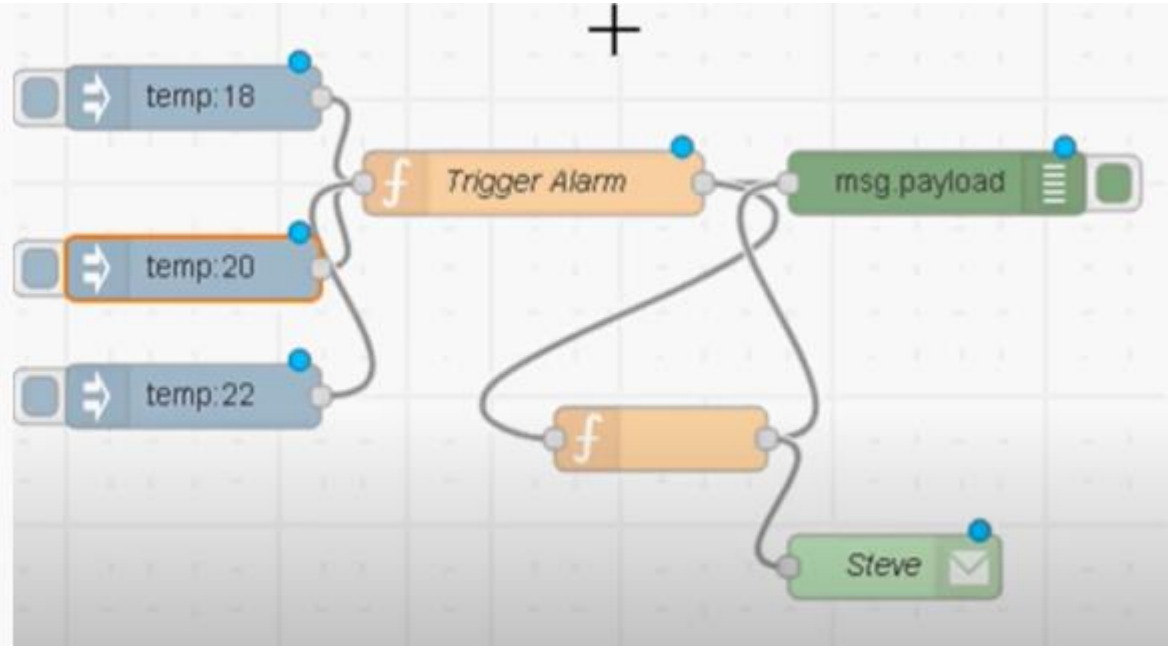


Gmail Users

- need to either enable an application password, or
- enable less secure access via your Google account settings

Example

- Create a Node-Red flow for sending an email using message attributes.
- Write a simple Node-Red simulation setting an alarm when the temperature is more than 20.
- Write a simple Node-Red simulation setting an alarm through an alarm when the temperature is more than 20.
  - https://www.youtube.com/watch?v=rokLM4ZsMJQ




```
1  var payload=msg.payload;
2  var alarm_flag=context.get("alarm_flag");
3  if(typeof alarm_flag=="undefined")
4  alarm_flag=false;
5
6  if (payload>20 && !alarm_flag)
7  {
8      alarm_flag=true;
9      msg.alarm=1;
10     context.set("alarm_flag",alarm_flag);
11     return msg;
12 }
```

```
if (payload<=20 && alarm_flag)
{
    alarm_flag=false;
    msg.alarm=0;
    context.set("alarm_flag",alarm_flag);
    return msg;
}
```


```
var temp=msg.payload;
msg.to="stevecope@onetel.com";
msg.from="noreply@gmail.com";

var d =new Date();
var message="";
if(msg.alarm)
{
    msg.topic="High Temperature Alarm";
    message=" High Temperature Alarm temp= ";
}
else
{
    message=" Temperature now normal temp= ";
   msg.topic="Temperature Alarm Reset";
}
msg.payload="time:"+d+message +msg.payload;
return msg;
```

Task

- Drug consumption level notification through Email
- The drug consumption is identified three levels
  - High
  - Medium
  - Low
- The consumption is decided based on patient's three parameters
  - HR
  - SpO2
  - BP
- If all the values are high alert the indication as "High"
- If all the values are Low alert the indication as "Low".
- Other cases it is "medium".

Parameter	Normal values	Low	High
HR	Between 60 to 90 beats per minute	<60	>90
SpO2	Between 80 to 90	<80	>90
BP	Between 90mm Hg and 120mm Hg	<90	>120

- **Message notification**
- **Simulate the alert indication in Dashboard of ThingsBoard**
  - Mention the subject as "Drug consumption level reg".
  - Message as HR:80,SpO2:85,BP:100,consumption level: Medium