

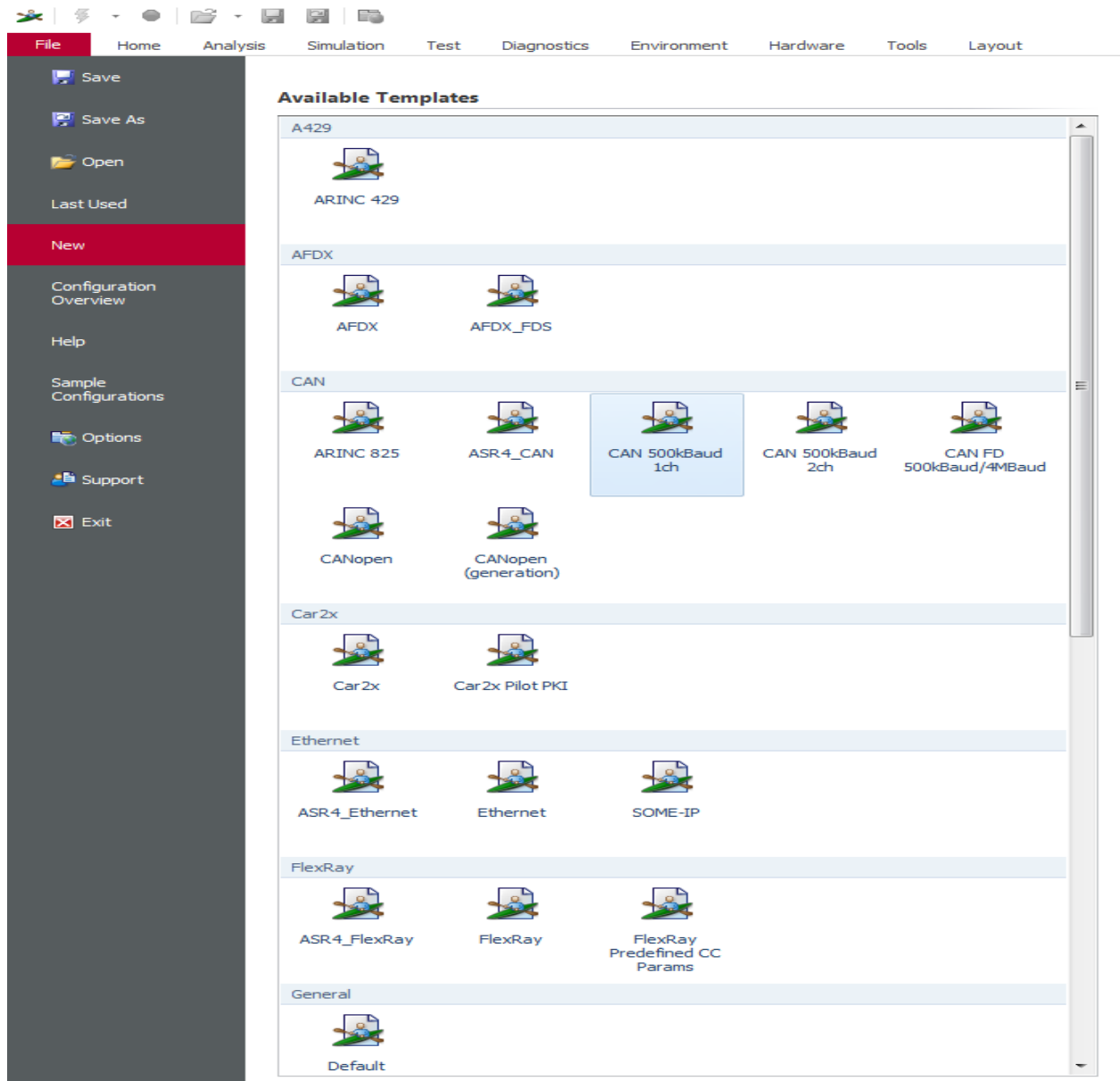
To Automate TENMA POWER SUPPLY 72-2540.

STEP1:

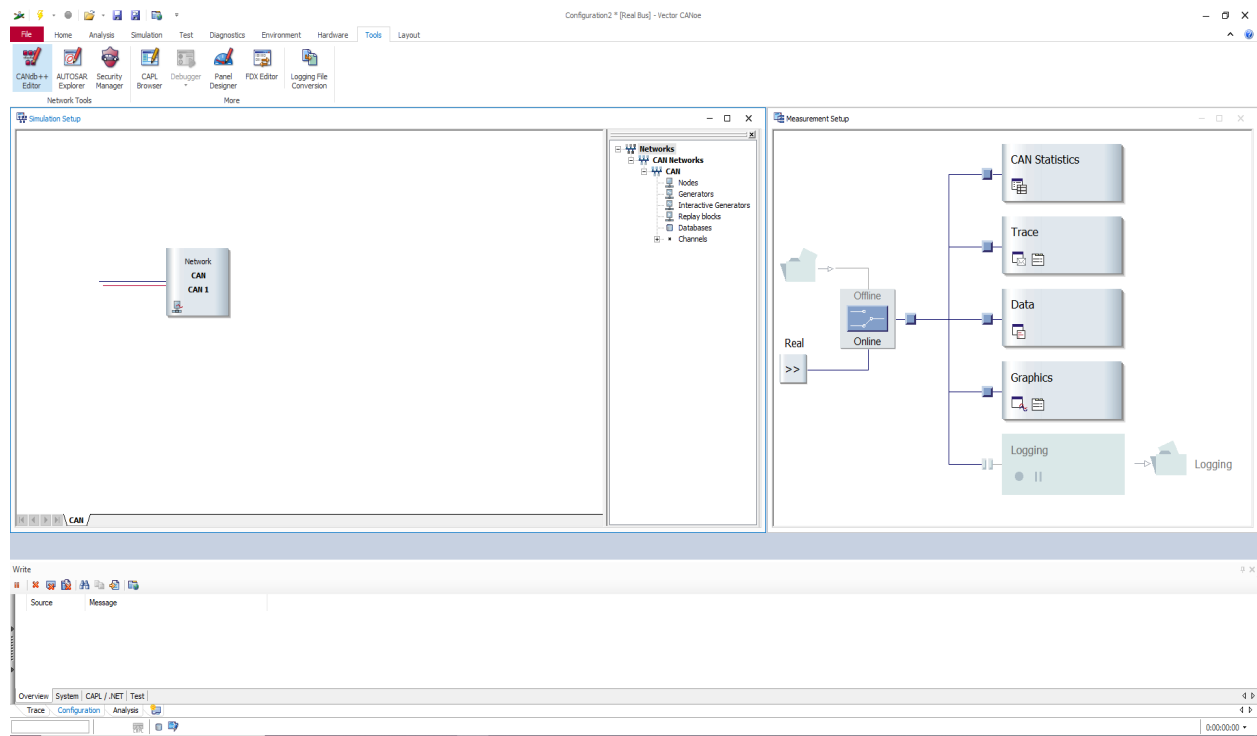
(Open CANoe and create a new project)

OPEN CANoe software.

File→ New→ CAN500KBaud(1channel).



New window opens:



STEP2:

(Insert a Network Node)

Right click on the red/black wire and select 'Insert Network Node'.

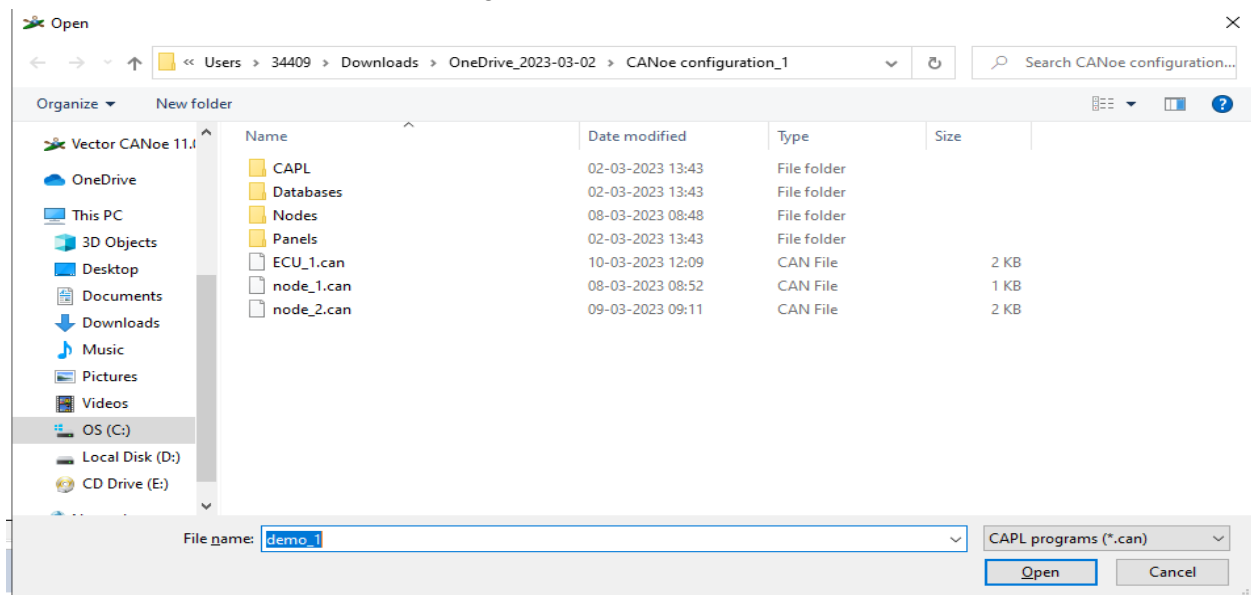


STEP 3:
(Open CAPL browser of the network node)



Double click on the yellow pencil () shown on the network node.

Now a new window opens for entering file name. Provide the file name and click '**open**'.



Now the CAPL browser opens.



STEP 3:

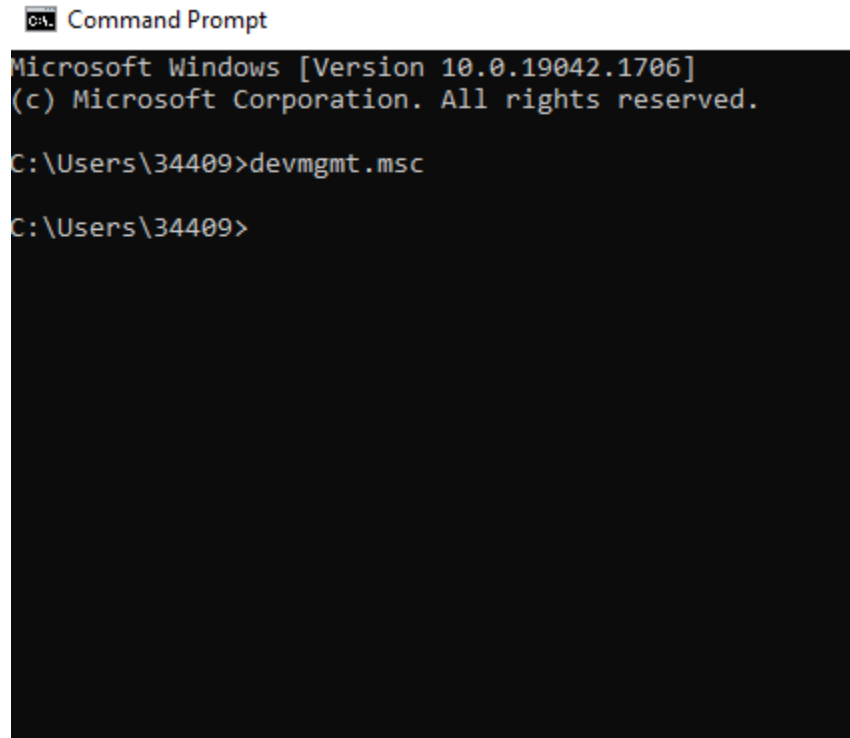
(Place the CAPL Code)

Now paste the code after the **variable section** in the CAPL window.

```
on start
{
    long res;
    res = rs232Open(4); //open port number 4
    if(res==1)
        write("opened port is success");
    res = rs232Configure(4,9600,8,1,0); // 4 indicates port number and 9600 indicates the
    baud rate.
    if(res==1)
        write("configure port is success"); //In the write window "configure port is success"
    message will appear.
}
```

//To know the port number (rs232 converter connects to the CPU).

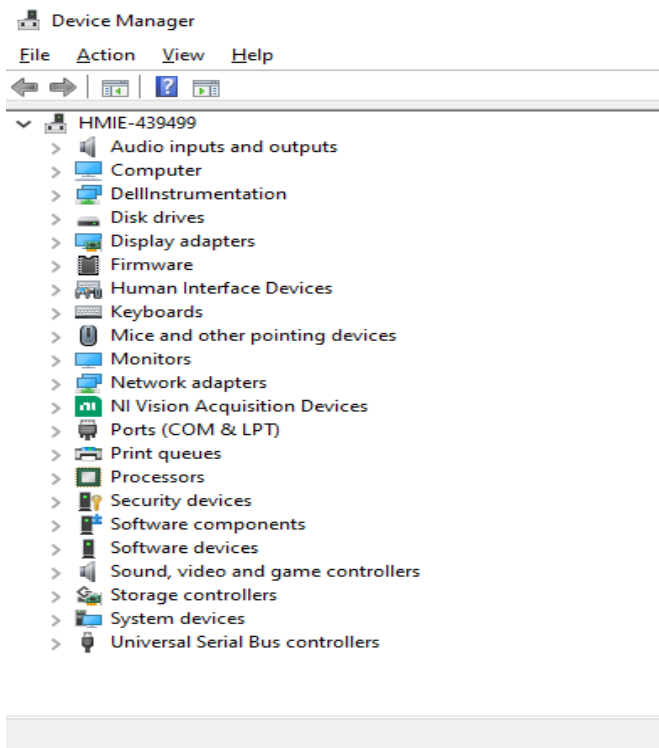
Open the **command prompt** window . Then type **devmgmt.msc** and press enter .

A screenshot of a Windows Command Prompt window. The title bar at the top reads "C:\> Command Prompt". The main area of the window has a black background with white text. It displays the Microsoft Windows version information: "Microsoft Windows [Version 10.0.19042.1706]" and the copyright notice: "(c) Microsoft Corporation. All rights reserved." Below this, the current directory is shown as "C:\Users\34409>". The command "devmgmt.msc" has been entered and executed, as indicated by the prompt "C:\Users\34409>" appearing again on the next line.

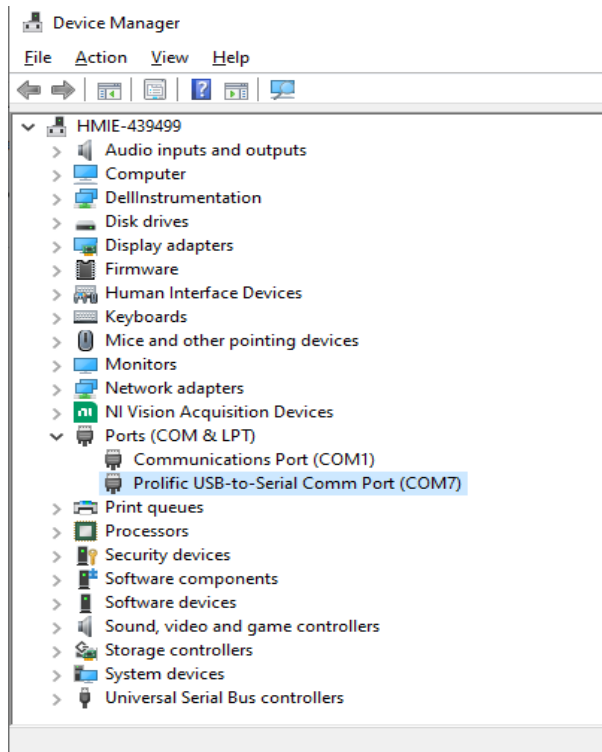
```
C:\> Command Prompt
Microsoft Windows [Version 10.0.19042.1706]
(c) Microsoft Corporation. All rights reserved.

C:\Users\34409>devmgmt.msc
C:\Users\34409>
```

Now the **device manager** window opens.



Select the **port** option here.



Here it shows the port is 7

```
on key 'i'
{
    int i;
    int length;
    long res;
    char text[30] = "ISET1:2.0";
    byte buffer[30];
    length = strlen(text)+1;
    for(i=0;i<length;i++)
        buffer[i]=text[i];
    res = rs232Send(4,buffer,length);
    if(res==1)
        write("send success");
}
```

This section shows the current level to 2.0 Ampere . 'ISET1:2.0' Command of TENMA Power supply to set the voltage level (channel 1) . **[Only occurs when pressing the key 'i' in the keyboard]**

```

on key 'v'
{
    int j;
    int length1;
    long res1;
    char text1[30] = "VSET1:5.0";
    byte buffer[30];
    length1 = strlen(text1)+1;
    for(j=0;j<length1;j++)
        buffer[j]=text1[j];
    res1 = rs232Send(4,buffer,length1);
    if(res1==1)
        write("send success");
}

```

This section shows the voltage level to 5.0 Volts . **'VSET1:5.0'** Command of TENMA Power supply to set the voltage level (channel 1) .**[Only occurs when pressing the key 'v' in the keyboard]**

```

on key 'o'
{
    int x;
    int length11;
    long res11;
    char text[30] = "OUT0";
    byte buffer[30];
    length11 = strlen(text);
    for(x=0;x<length11;x++)
        buffer[x]=text[x];
    res11 = rs232Send(4,buffer,length11);
    if(res11==1)
        write("send success");
}

```

This section shows how to Turn OFF the power supply. **'OUT0'** indicate the command of TENMA power supply to turn off the power supply.**[Only occurs when pressing the key 'o' in the keyboard]**


```

on key 'f'
{
    int k;
    int length11;
    long res11;
    char text[30] = "OUT1";
    byte buffer[30];
    length11 = strlen(text);
    for(k=0;k<length11;k++)
        buffer[k]=text[k];
    res11 = rs232Send(4,buffer,length11);
    if(res11==1)
        write("send success");
}

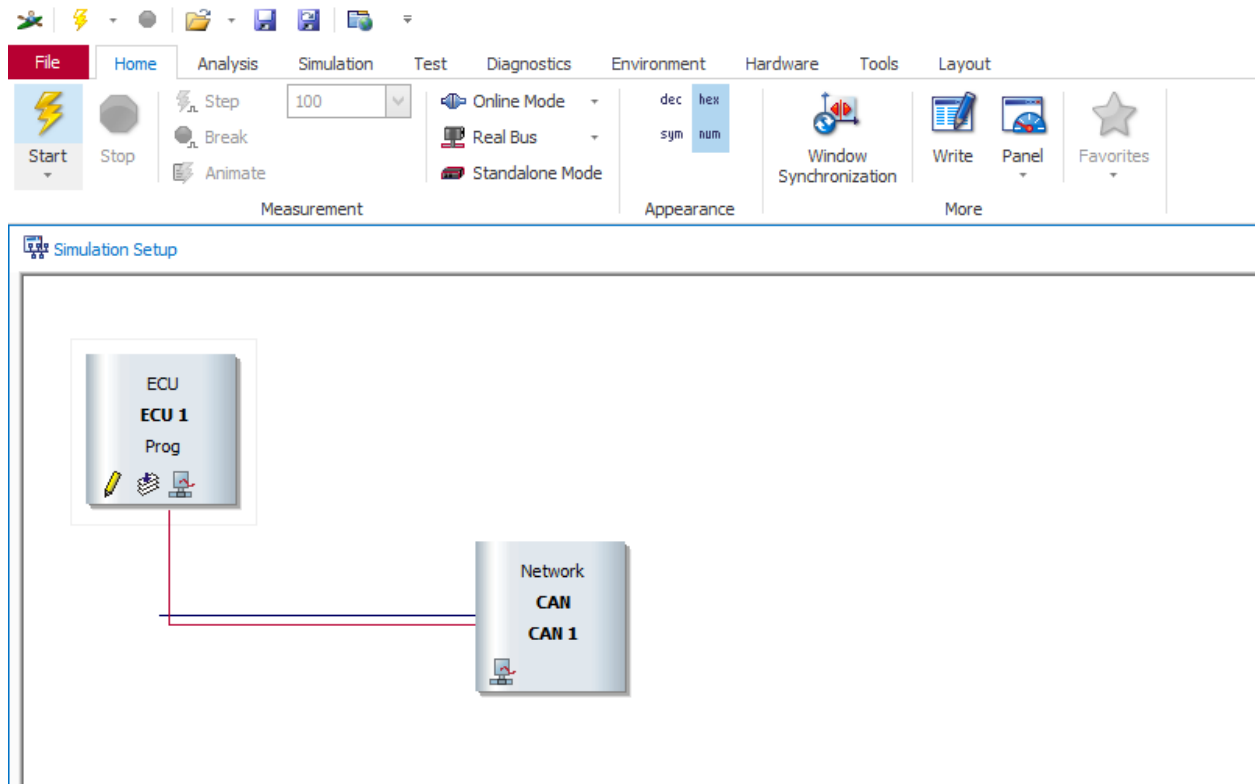
```

This section shows how to Turn ON the power supply. 'OUT1' indicate the command of TENMA power supply to turn on the power supply.**[Only occurs when pressing the key 'f' in the keyboard]**

Paste the code in the CAPL power and the **Save** it.



Go to **CANoe** and press start button(——) to start simulation.



On the bottom of the **CANoe window** , there will be a **write window**. Here we can see the **messages**.

