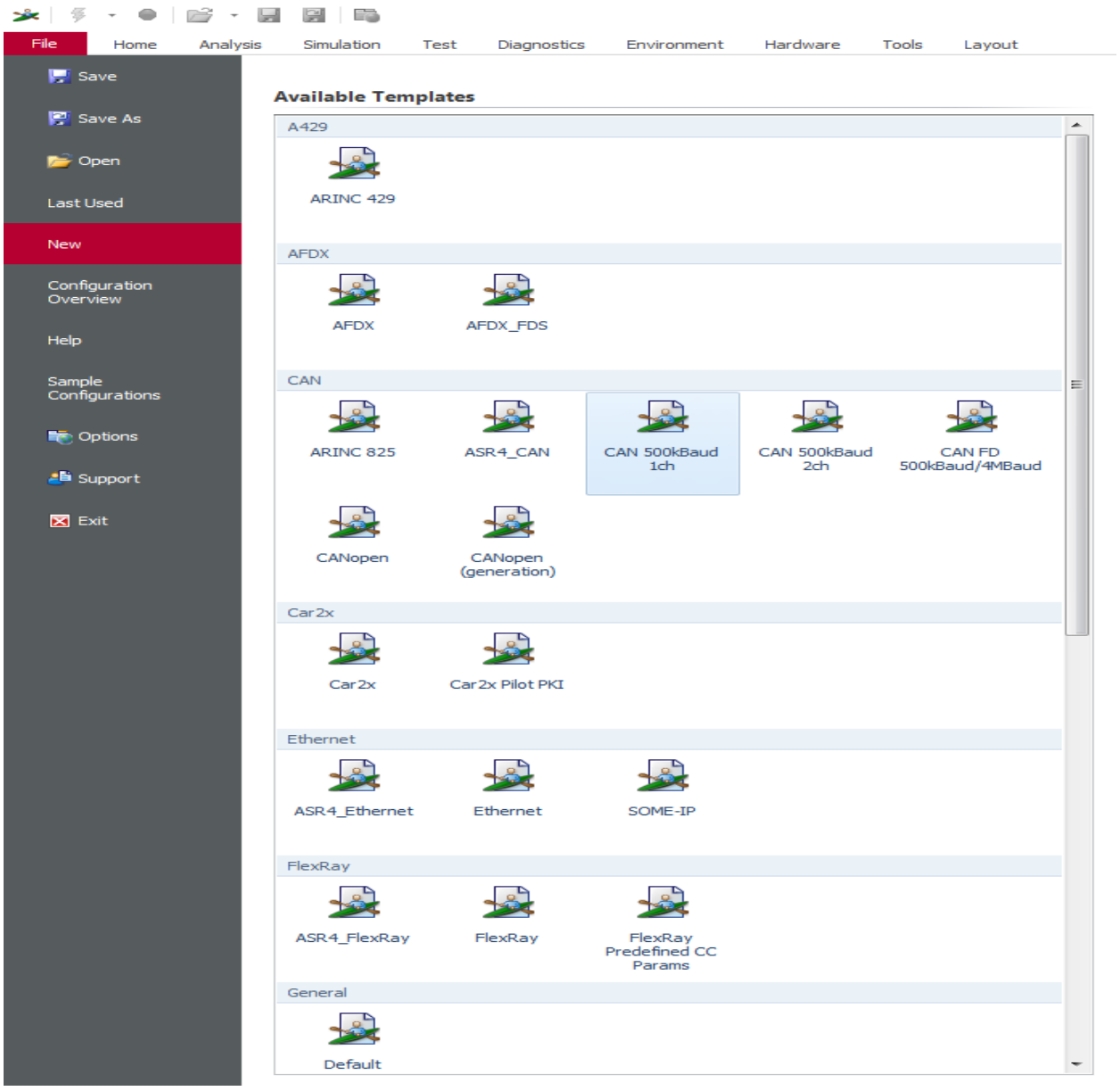
To Automate TENMA POWER SUPPLY 72-2540.

STEP1:

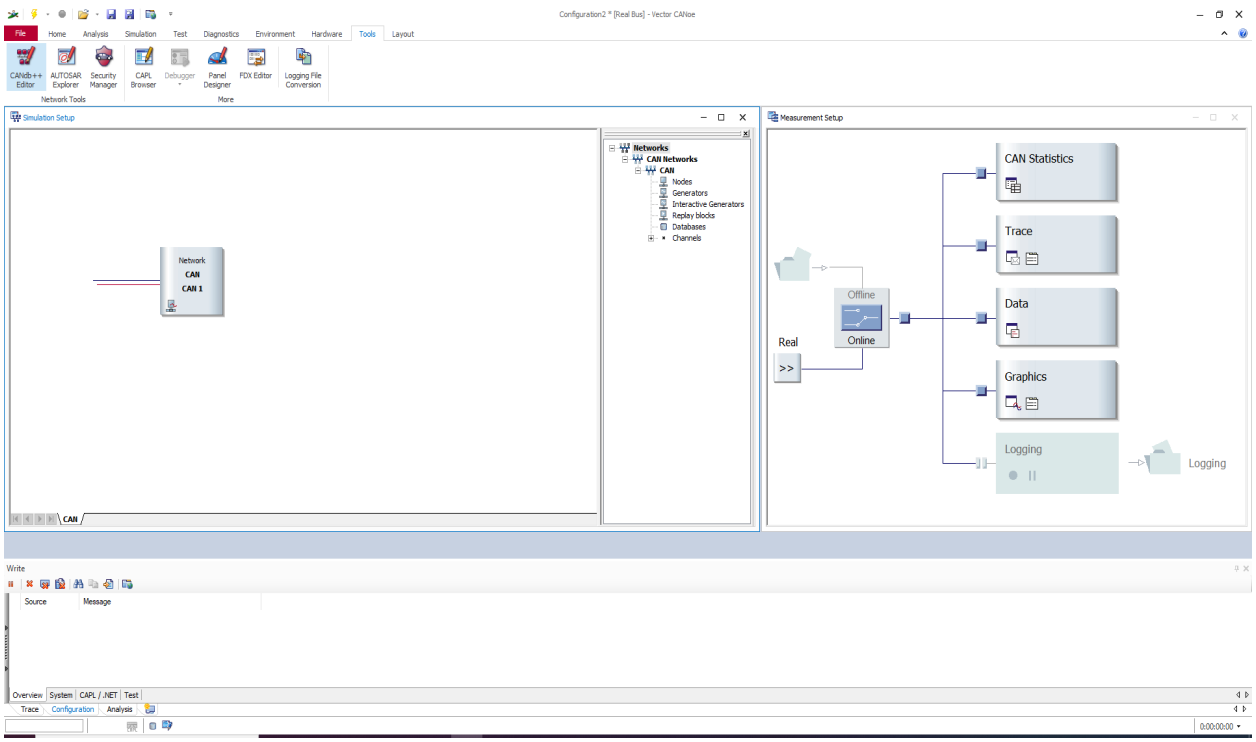
(Open CANoe and create a new project)

OPEN CANoe software.

File→ New→ CAN500KBaud(1channel).



New window opens:



STEP2:

(Insert a Network Node)

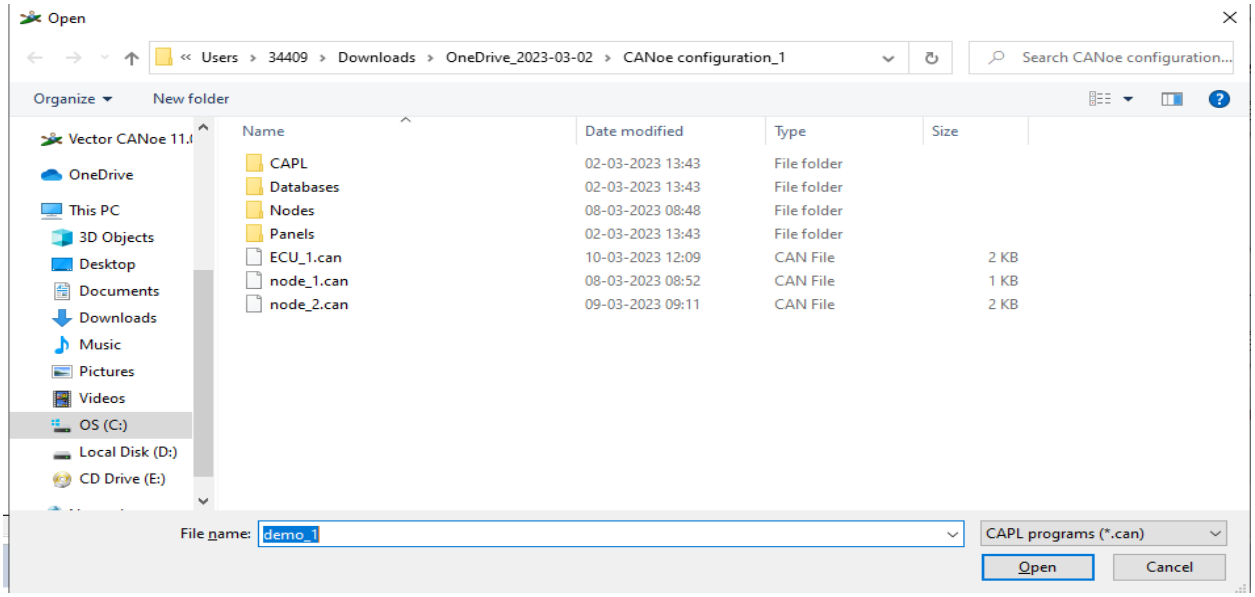
Right click on the red/black wire and select **'Insert Network Node'.**

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.

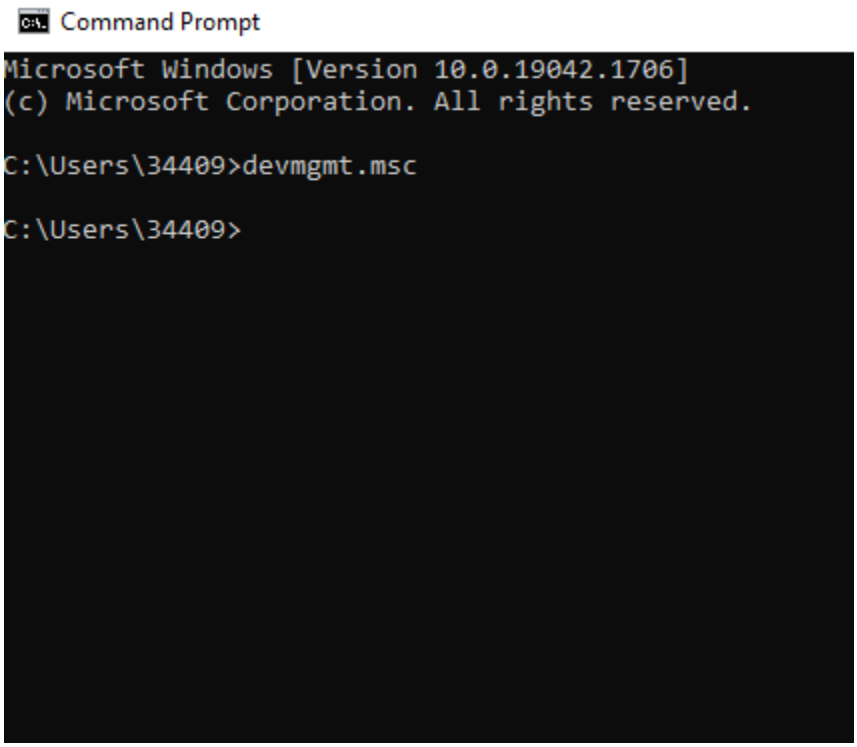
STEP 3:
(Place the CAPL Code)

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

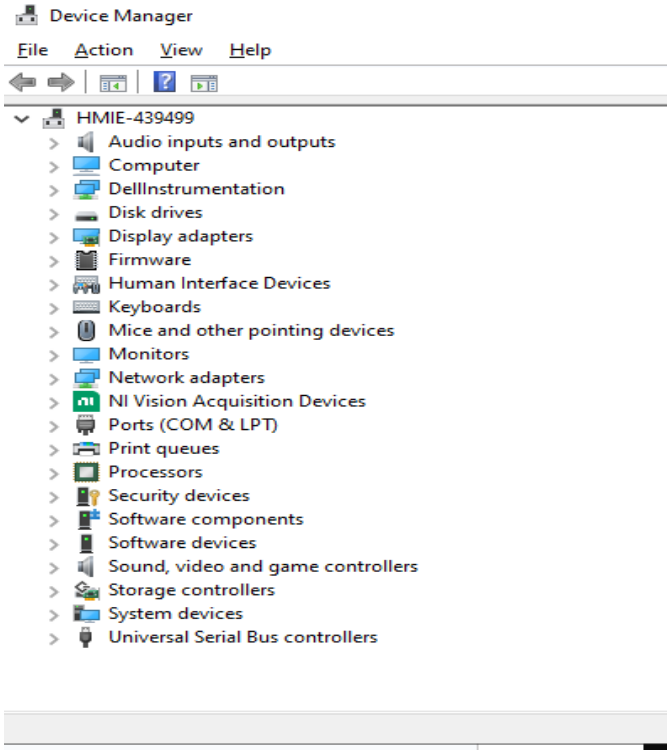
```
on start
 {
   long res;
   res = rs232Open(4); //open port number 4
   if(res==1)
          write("opened port is success");
    res = rs232Configure(4,9600,8,1,0); // 4 indicates port number and 9600 indicates the
baud rate.
   if(res==1)
          write("configure port is success"); //In the write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

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

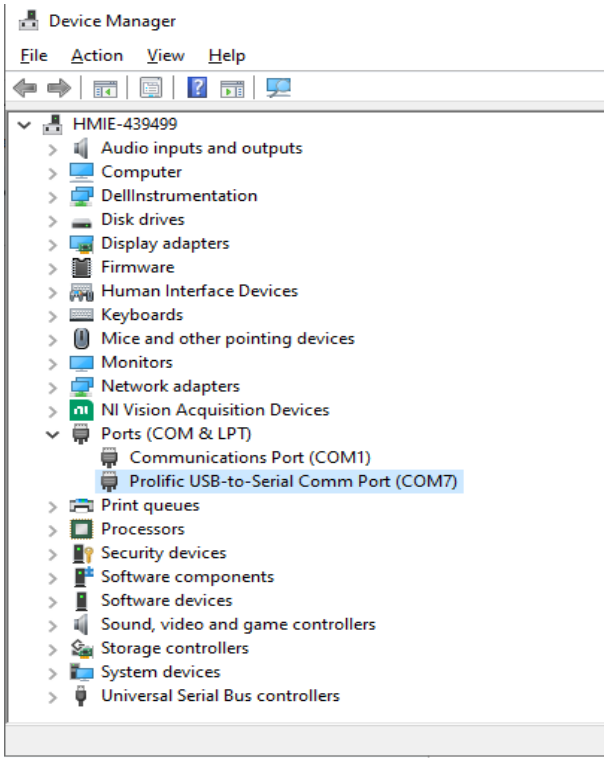
Open the **command prompt** window . Then type **devmgmt.msc** and press enter .



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");
}
```

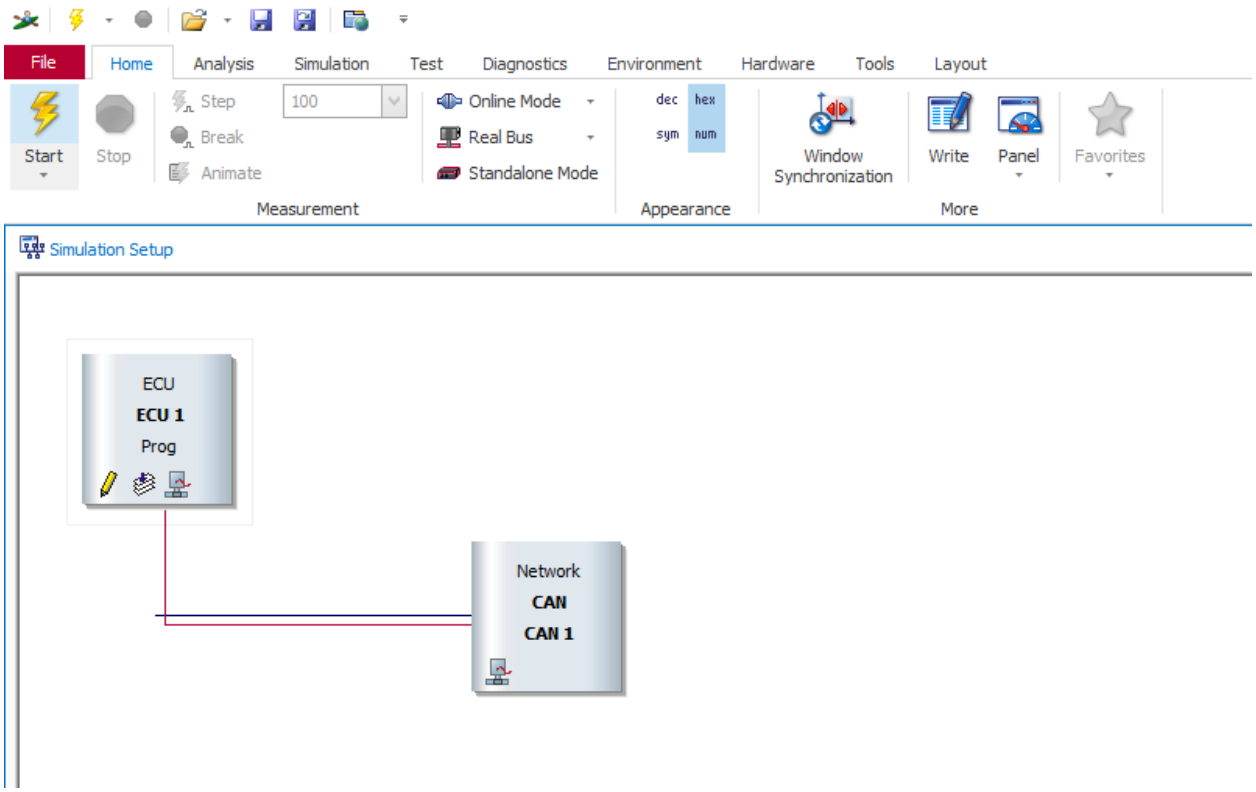
This section shows how to Turn OFF the power supply. 'OUT0' indicate the command of TENMA power supply to turn off the power supply.**[Only occurs when pressing the key 'o' in the keyboard]**

```
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.**