

GSM TEST & GSM NETWORK TIME SYNCHRONIZATION FIXED BY SHAMIM

```
#include <SoftwareSerial.h>
//Create software serial object to communicate with SIM800L
SoftwareSerial mySerial(10, 11); //SIM800L Tx & Rx is connected to Arduino #3
& #2
void setup()
{
//Begin serial communication with Arduino and Arduino IDE (Serial Monitor)
Serial.begin(9600);
//Begin serial communication with Arduino and SIM800L
mySerial.begin(9600);
Serial.println("Initializing...");
delay(1000);
mySerial.println("AT"); //Once the handshake test is successful, it will back to
OK
updateSerial();
mySerial.println("AT+CSQ"); //Signal quality test, value range is 0-31 , 31 is the
best
updateSerial();
mySerial.println("AT+CCID"); //Read SIM information to confirm whether the
SIM is plugged
updateSerial();
mySerial.println("AT+CREG?"); //Check whether it has registered in the network
mySerial.println("AT+CCLK?"); //Once the handshake test is successful, it will
back to OK
updateSerial();
```

```
mySerial.println("AT+CLTS=1"); //Once the handshake test is successful, it will  
back to OK  
updateSerial();  
mySerial.println("AT+CLTS?");  
updateSerial();  
mySerial.println("AT&W");  
updateSerial();  
mySerial.println("AT+CCLK?");  
updateSerial();  
Serial.println("Please Power OFF the System Once...");  
delay(10000);  
}
```

```
void loop()  
{  
  delay(29000);  
  mySerial.println("AT+CCLK?");  
  updateSerial();  
}
```

```
void updateSerial()  
{  
  delay(1000);  
  while (Serial.available())  
  {  
    mySerial.write(Serial.read()); //Forward what Serial received to Software  
Serial Port  
  }  
}
```