```
#include   "DHT.H"
 #define   DHTPIN
# define   DHTTYPE  DHT11
# define   dht_apin  A0
 DHT  dht (DHTPIN, DHTTYPE) ;
Const  int  sensorPin = A0;
int reading;
float voltage;
float temperature;
int ledPin =13;
int value;
String input String =" ";
Boolean string Complete = false ;
void setup( )  {
Serial.begin(9600);
PinMode (ledPin,OUTPUT);
Serial.println("DHTxx test"!);
dht.begin ( );
input String .reserve(200) ;
rvoid loop ()
{
Reading=analogRead(sensorPin);
```

```
Voltage=reading*5.0/1024;
Serial.print(voltage);
serial.println("volts");
temperatureC=(voltage-0.5)*100;
//  Serial.println ("temperature is:");
// Serial.print("temperatureC ");
Serial.println("degrees C");
value =Serial.read( );
if (value=='1') {digitalWrite(ledPin,HIGH ); }
else if (value =='0') {digitalWrite(ledPin,LOW  );}
// Wait a few seconds between measurement .
delay(2000) ;
float h = dht.readHumidity( );
//Read temperature as Celsius (the default  )
float t = dht.readTemperature  ( );
//Read temperature as Fahrenheit (isFahrenheit = true )
float f = dht.readTemperature(true)  ;
//Check if any reads failed and exit early (to try again);
if (isnan(h) || isnan(t) || isnan(f) )
{
Serial.println("Failed to read from DHT sensor !");
return ;
}
//Compute heat index in Fahrenheit (the default)
```

```
float hif = dht.computeHeatIndex(f, h ) ;
//Compute heat index in Celsius (isFahreheit = false)
float hic = dht.computeHeatIndex(t, h, false );
Serial.print("Humidity:");
Serial.print(h);
Serial.print(" %\t ") ;
Serial.print("Temperature :");
Serial.print(t );
Serial.print(" *C ") ;
Serial.print(f  );
Serial.print(" *F\t" ) ;
Serial.print("Heat index: " );
Serial.print(hic)  ;
Serial.print(" *C ") ;
Serial.print(hif)  ;
Serial.println(" *F") ;
} (if (stringComplete
Serial.println(inputString ) ;
//clear the string:
inputString =" " ;
stringComplete = false ;
}
}
void serialEvent () {
```

```
while (Serial.available ( ) )
{
char inChar = (char)Serial.read ( );
inputString += inChar  ;
if (inChar == '\ n')   ;
stringComplete = true  ;
}
}
}
```