Celsius Out - Arduino sketch to read output from a BMP280 atmospheric temperature

```
//  Arduino sketch to read output from a BMP280 atmospheric temperature/pressure sensor
// and display it every 2 seconds on the Serial Monitor and on a 2-line LCD shied with
// temperature in Celsius “C” and pressure in hectoPascals “kPa”.

#include <Wire.h>

#include <Adafruit_Sensor.h>

#include <Adafruit_BMP280.h>

#include <LiquidCrystal.h>


// Create an instance of the BMP280 sensor

Adafruit_BMP280 bmp;


// Create an instance of the LCD, specify the pins connected to RS, EN, D4, D5, D6, D7

LiquidCrystal lcd(8, 9, 4, 5, 6, 7);


void setup() {

 // Initialize serial communication

 Serial.begin(9600);


 // Initialize the BMP280 sensor

 if (!bmp.begin(0x76)) {

  Serial.println("Could not find a valid BMP280 sensor, check wiring!");

  while (1);

 }


 // Initialize the LCD
```

```
  lcd.begin(16, 2);
  lcd.print("BMP280 Sensor");
}

void loop() {
  // Read temperature from BMP280 sensor
  float temperature = bmp.readTemperature();

  // Read pressure from BMP280 sensor
  float pressure = bmp.readPressure();

  // Print data to serial monitor
  Serial.print("Temperature = ");
  Serial.print(temperature);
  Serial.println(" C");

  Serial.print("Pressure = ");
  Serial.print(pressure / 100.0F);
  Serial.println(" hPa");

  // Print data to the LCD
  lcd.setCursor(0, 0);
  lcd.print("Temp: ");
  lcd.print(temperature);
  lcd.print(" C");
```

```
  lcd.setCursor(0, 1);
  lcd.print("Pres: ");
  lcd.print(pressure / 100.0F);
  lcd.print(" hPa");

  // Wait for 2 seconds before repeating
  delay(2000);
}
```