ABSTRACT

In previous studies, the ds18b20 temperature sensor measured the hot or cold energy produced by an object, allowing us to know or detect symptoms of such temperature changes in both analog and digital outputs.

Based on this, a design and implementation of automatic temperature-regulating compress pillows can help compress or lower the body temperature in the child. Use it simply by attaching or placing this pillow compress tool onto the part of the body that you want to compress. Can be easily used under any circumstances indoors and outdoors.

Based on the results of the testing that has been done the system successfully sends data from the DS18B20 temperature sensor to the Arduino then Arduino conveys the command to the LCD to display the temperature on the heat compress pillow to the LCD with a delay of 2 seconds. The LCD displays data in the form of letters and the temperature is a number.

Keywords: Heat compress pillow, heating element, automatic temperature control, temperature sensor ds18b20.