# Read temperature with an ARM32 development kit and save the value to FLASH MEMORy

## Requirements

The purpose of this project is to create a software for a development kit which monitors the temp. sensor every X min (this parameter can be changed later by the user), saves them to flash memory and transmits it to a cloud service.

The time of reading the sensor is recorded.

The dev. kit transmits the acquired data (seq. number, timestamp and the temperature) to the selected cloud service (through the internet).

The dev. kit shows the last monitored temp. value on the LCD screen (along with sequence number and time stamp).

The dev. kit must save monitored values to FLASH memory.

The dev. kit reads saved values from the flash memory and shows on the LCD screen.

## Main use cases

1. Init Hardware
2. Init LCD screen
3. Init Ethernet and connect to internet time service
4. Connect to Claud Service
5. Read temperature sensor
6. Send data to cloud service
7. Save data to flash memory
8. Print data on LCD screen