

1. Download the EEPROM example code from Arduino website.

URL: <https://www.arduino.cc/en/Tutorial/LibraryExamples/EEPROMRead>

image developed using [Fritzing](#). For more circuit examples, see the [Fritzing project page](#)

Code



```
/*
 * EEPROM Read
 *
 * Reads the value of each byte of the EEPROM and prints it
 * to the computer.
 * This example code is in the public domain.
 */

#include <EEPROM.h>

// start reading from the first byte (address 0) of the EEPROM
int address = 0;
byte value;

void setup() {
  // initialize serial and wait for port to open:
  Serial.begin(9600);
  while (!Serial) {
    ; // wait for serial port to connect. Needed for native USB port only
  }
}
```

2. Replace code section on line 27-30 with a single Serial.print().

The cast to char will convert the byte returned by EEPROM.read() to an ascii character.

27	Serial.print(address);	26	
28	Serial.print("\t");	27	Serial.print((char)value);
29	Serial.print(value);	28	
30	Serial.println();	29	/**

Original

Replaced

3. Compile the .ino File with arduino-cli (<https://github.com/arduino/arduino-cli>). The FQBN "arduino:avr:nano" was chosen based on the ATmega328p microcontroller which is used in the Arduino Nano.

The verbose Flag (-v) was used to find the Temp Directory where the compiled file was saved. It is not required for compilation.

```
o>arduino-cli compile -b arduino:avr:nano -v
```

4. Upload the compiled .hex file (not the file with the bootloader) to the ReadEEPROM page & flash the firmware.

core	24/04/2021 17:19	File folder	
libraries	24/04/2021 17:19	File folder	
preproc	24/04/2021 17:19	File folder	
sketch	24/04/2021 17:44	File folder	
arduino.ino.eep	24/04/2021 17:48	EEP File	1 KB
arduino.ino.elf	24/04/2021 17:48	ELF File	22 KB
arduino.ino.hex	24/04/2021 17:48	HEX File	5 KB
arduino.ino.with_bootloader.bin	24/04/2021 17:48	BIN File	32 KB
arduino.ino.with_bootloader.hex	24/04/2021 17:48	HEX File	6 KB
build.options.json	24/04/2021 17:48	JSON File	1 KB
compile_commands.json	24/04/2021 17:48	JSON File	2 KB
includes.cache	24/04/2021 17:48	CACHE File	1 KB

Simulator control

Upload File

Choose File arduino.ino.hex

Upload file

Flash and start

Press start and wait!

start

5. The serial output contains the flag.

2021-04-24T16:41:41

HL{d85fba6c-8cbb-46d6-b3c3-6e12af06c8fa} ? ? ?