LABORATORY

Microcontrollers

LAB 6

NAME	KELVIN MAKAKA
MATRICULATION NUMBER	26219
STUDY COURSE	MECHATRONIC SYSTEMS ENGINEERING
SLOT	SE SLOT 4
PRESENTATION DATE	12.12.2019
SUBMISSION DATE	09.12.2019

Task 1.

a) Button1 initialises the *save_value* function where the ADC reading is written into the memory.
b) Reading from ADC is set to *poti* variable via ADCW and is input into the *save_value* function.
c) The ADC reading is split into two bytes of 8 bits each, highbyte and lowbyte.
d) The bytes are then written into the memory slots with the start position being selected through the *i2c_master_write(#)* function.
e) Button2 initialises the *load_value* function which returns (reads) information from the memory.
f) The *load_value* function starts the communication with device and initialises the reading process.

Task 2.

a) Button1 initialises the *save_menu* function.
b) *Save_menu* function's input is the ADC reading where repeated pressing of button1 scrolls the memory slots from down-up and Button2 initialises the *save_value* function which writes the reading from the ADC into the currently selected memory slot.
c) Button2 initialises the *load_menu* function where the user can select which memory slot to read from.