COMPUTER ORGANIZATION, Final practical Exam

Dept. Computer Architecture

Feb 14th, 2017

CLIDNAME	NAME:

## DIRECTIONS FOR THE EXAM

User: EC001, psw: labec

First of all, check that your Raspberry works by using the Full\_test.s program.

Download all the files that you want from your pendrive to the hard disc (after 5 minutes, no any further download will be permitted). Mobile phone is also prohibited for the exam.

After this, you can start with the exam. Create your programs in the folder d:/EC/RBPi

You have to make two independent programs. The name of the first one is your surname followed by 1 (first program) and followed by 2 for the second program (example: if your surname is "perez", the name of your program will be perez1.s and perez2.s).

Once you finish the first exercise, please call me to assess your program (the same for the second program).

## EXAM:

- 1) Write a program that carries out the following tasks (up to 5 points):
  - a. Initially, the first yellow have to be ON (1 pt)
  - b. Turn ON the second red LED while you are pressing the first push button (+2 pt)
  - c. After pressing the second push button, a sound of 2 KHz has to be produced permanently, and one of the green leds will turn on (+2 pts)
- 2) Write a program that (up to 5 points):
  - a. generate a sound of 110HZ for the first 2 seconds only (1 pts)
  - b. Afer the 2th second, a tone of 1000 Hz will be generated permanently (+2)
  - c. Afer the 2th second , if any botton is pressed the sound will turn off permantly all the leds will flash with a cadence of 0.1 s. (+2)

