Lab 5. Logic Gates

Logic Gates

This example shows the simplest thing you can do with an Arduino or Genuino to see physical output: how And, Or and Not gate work

Hardware Required (Circuit AND-OR):

- Arduino or Genuino Board
- Two (2) LEDs
- Two (2) 220 ohm resistor
- four(4) 10 Kilo ohm resistor
- Dip switch

Open the link below:

Gates.pdf (https://slcc.instructure.com/courses/1004604/files/165676772/download?wrap=1) (https://slcc.instructure.com/courses/1004604/files/165676772/download?download_frd=1)

AND-OR Logic Gates Schematic

LAB 5. AND-OR Logic gates.pdf (https://slcc.instructure.com/courses/1004604/files/165676967/download?wrap=1) (https://slcc.instructure.com/courses/1004604/files/165676967/download?download_frd=1)

NOT Logic Gate Schematic:

LAB 5. NOT Logic Gate.pdf (https://slcc.instructure.com/courses/1004604/files/165676973/download?wrap=1) (https://slcc.instructure.com/courses/1004604/files/165676973/download?download_frd=1)

Program in MIPS using Atmel Studio's IDE:

AND-OR Logic Gates:

LogicGates.asm (https://slcc.instructure.com/courses/1004604/files/165676733/download?wrap=1) (https://slcc.instructure.com/courses/1004604/files/165676733/download?download_frd=1)

Gates.ino (https://slcc.instructure.com/courses/1004604/files/165676551?wrap=1) (https://slcc.instructure.com/courses/1004604/files/165676551/download?download_frd=1)

NOT Logic Gate:

NotGate.asm (https://slcc.instructure.com/courses/1004604/files/165676619/download?wrap=1) (https://slcc.instructure.com/courses/1004604/files/165676619/download?download_frd=1)