

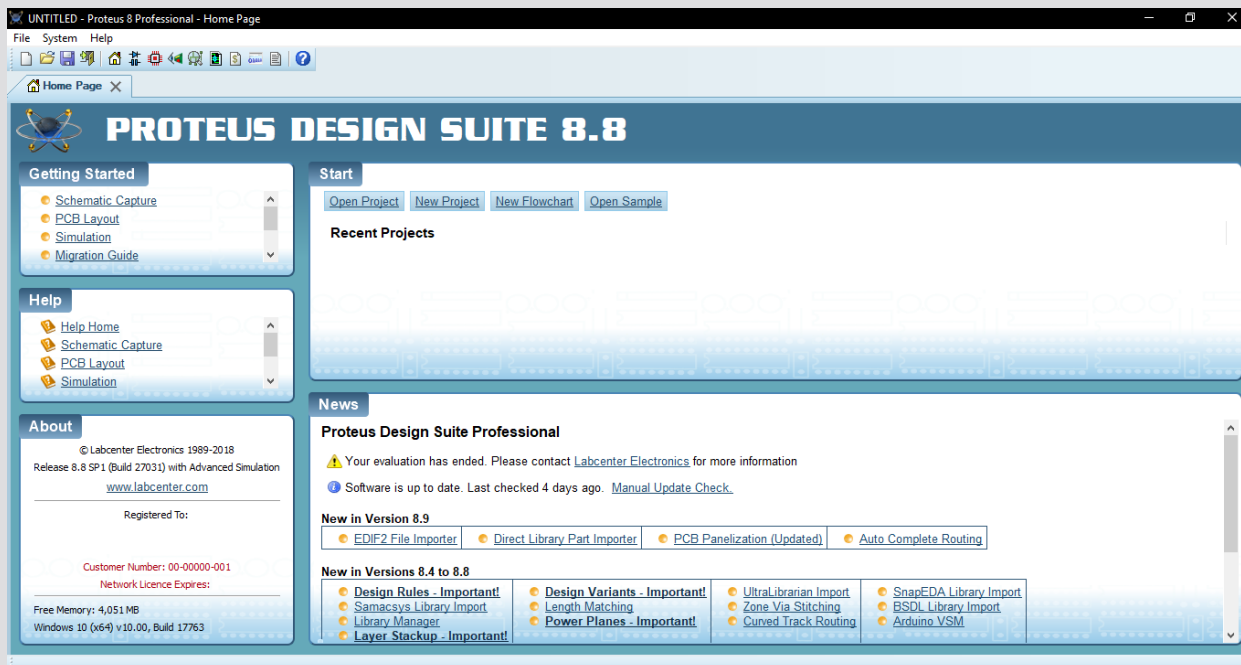
PRACTICAL

PRACTICAL

SIMILUTAINING THE THEORY

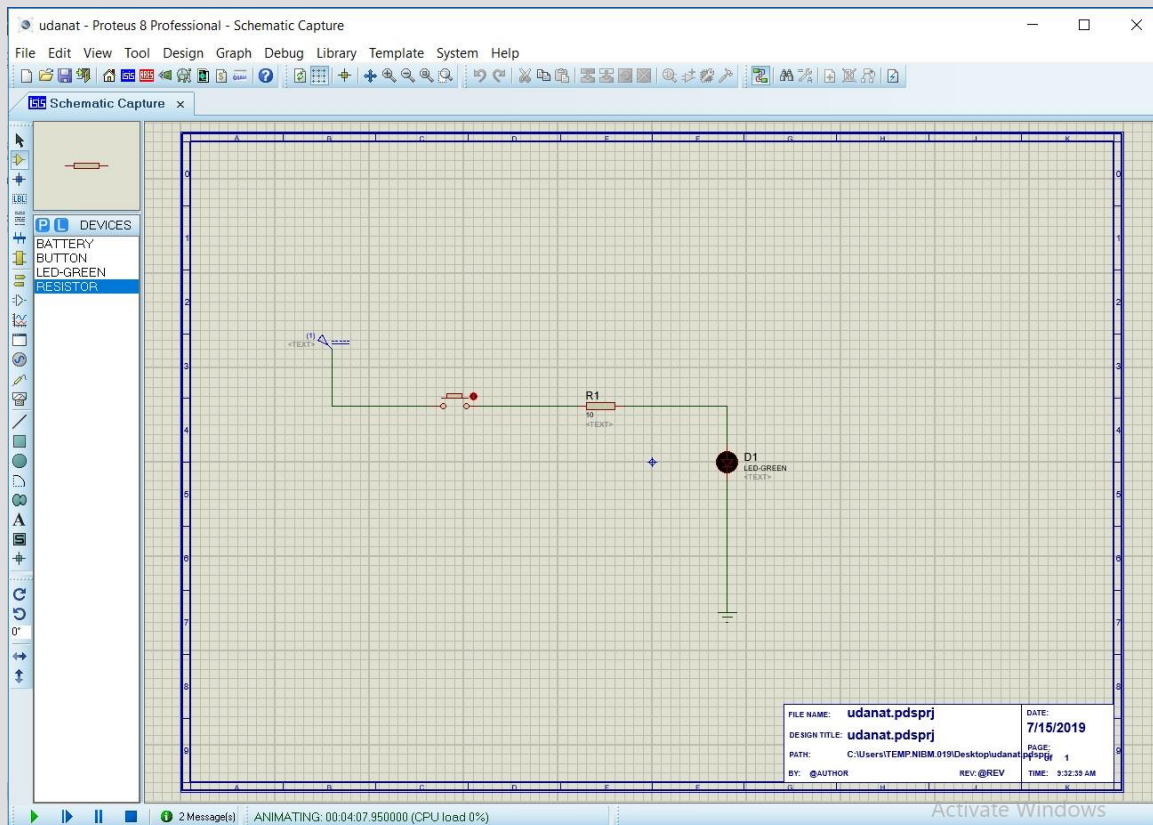
PRACTICAL SUMMARY

- STEPS!
- EVIDENCE AFTER THE STEPS MADE!
- SCREENSHOTS
- INSTRUMENTS



PRACTICAL 01

PRACTICAL 01 – Lighting Up the Bulb



Step 1: To Create A Project

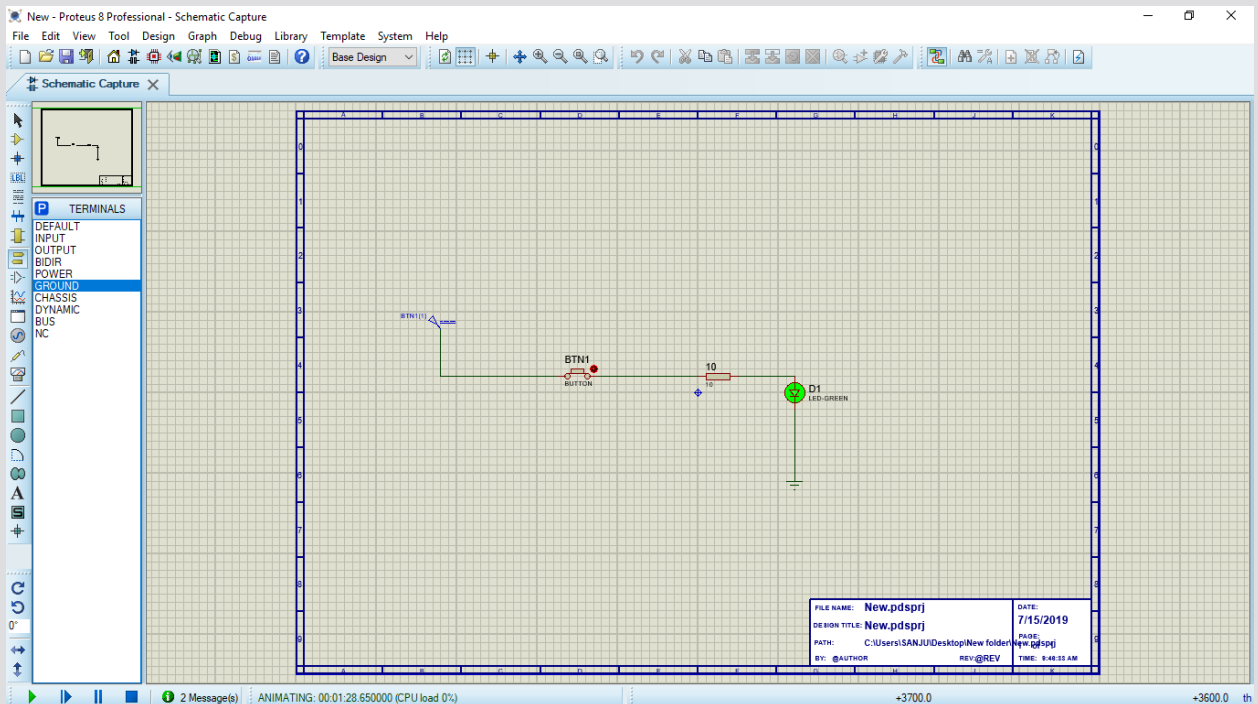
1. Open the Proteus and Click New project.
2. Name your project and Save it.
3. Click “**Next**” and select create a **schematic**.
4. Choose Landscape A4 and give “**Next**” for the rest

Step 2: Placing Components.

1. Choose component mode in left taskbar and Click the “P” button.
2. Search “**LED blue**” select it and place it on the active window.
3. Search “**Push Button**” and place it on the window.
4. Search “**Resistor**” and place the resistor on the window.
5. Generator mode > DC and place it on the window.
6. Connect components by clicking them.
7. Right click the window > Place > Terminal > Ground. Place it below.
8. Give a Voltage to DC e.g.: **5** & Resistor Resistance OHMS > **10**

Step 3: Lightening Up the LEDGREEN bulb

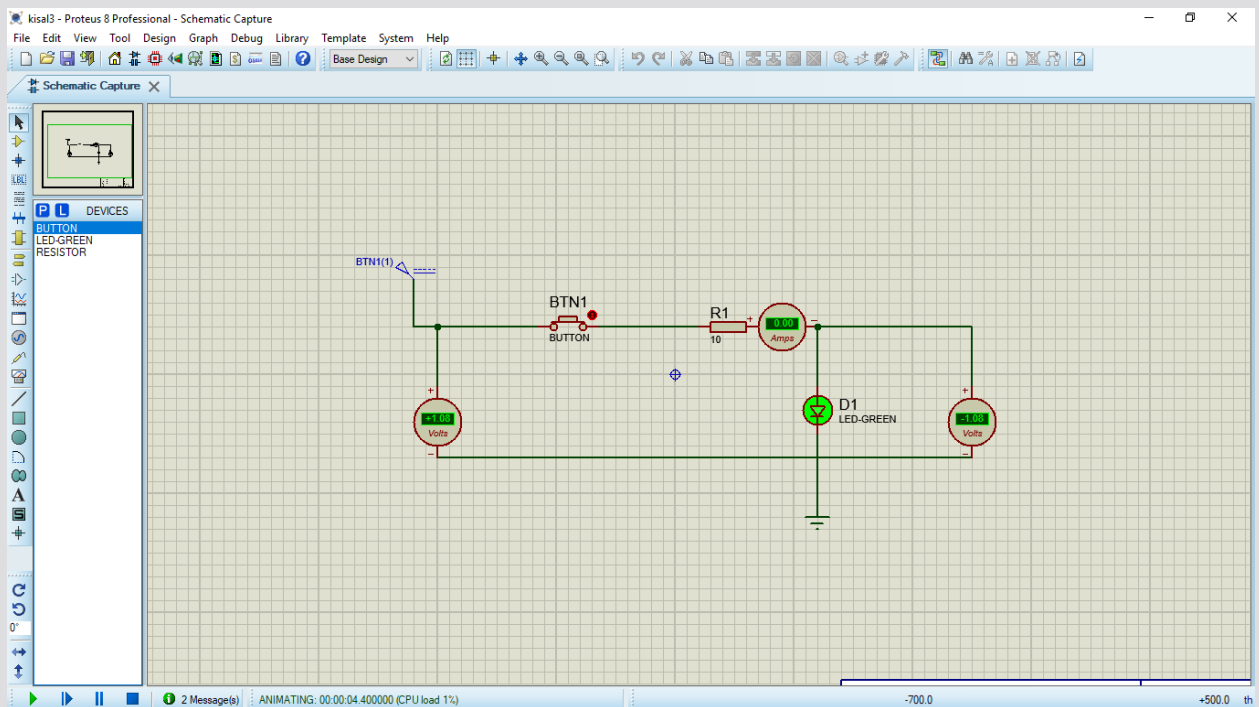
1. Once you completed placing components go left below the window
Press Play button to Animate.
2. You will see the LED is on. (Check picture below)



PRACTICAL 02

Step 4: Connect Voltage meter and Ammeter

1. Choose instrument in the left taskbar
2. Add two **DC VOLTMETER** and one **DC AMMETER** and Connect them like given below.



PRACTICAL 03

Logic Gate Review.

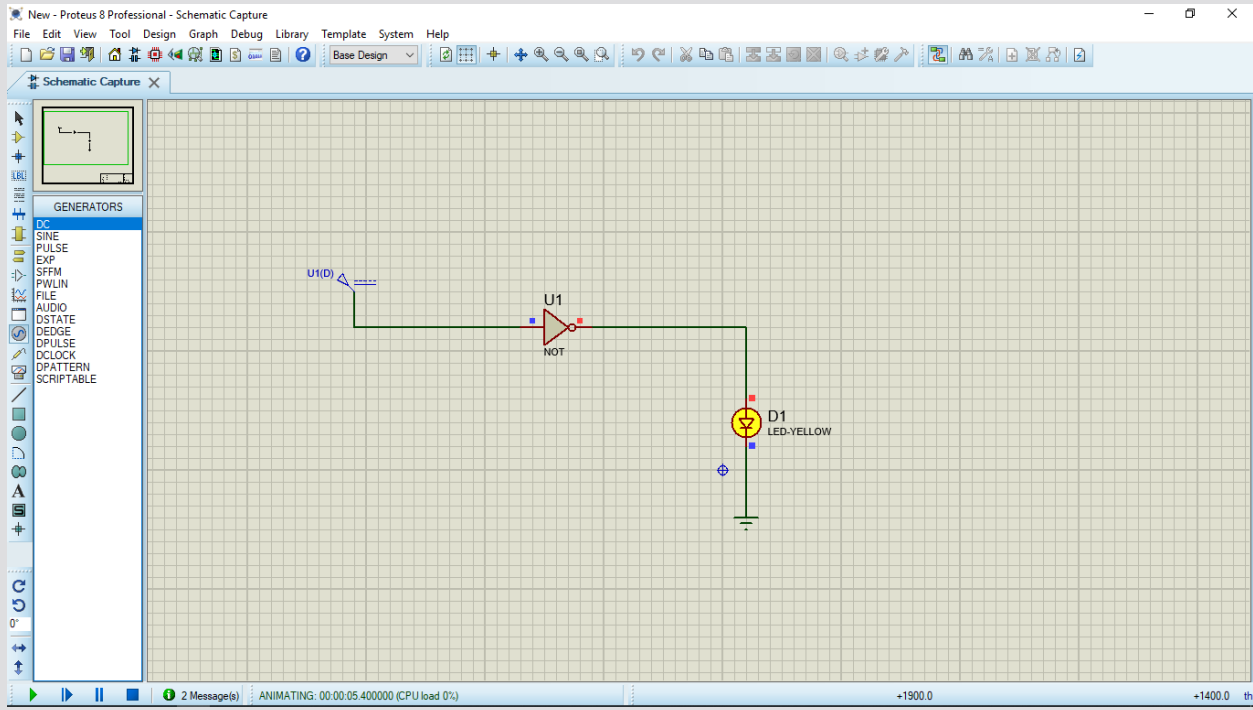
Steps:

1. Open New Project.
2. Search “LOGIC PROB”, “LOGIC STATE” & “NOT” Components on Component Mode.
3. Put them as Given Below.
4. You can see the output is changes to opposite when play Animate.



| Input | Output |
|-------|--------|
| A | Y |
| 1 | 0 |
| 0 | 1 |

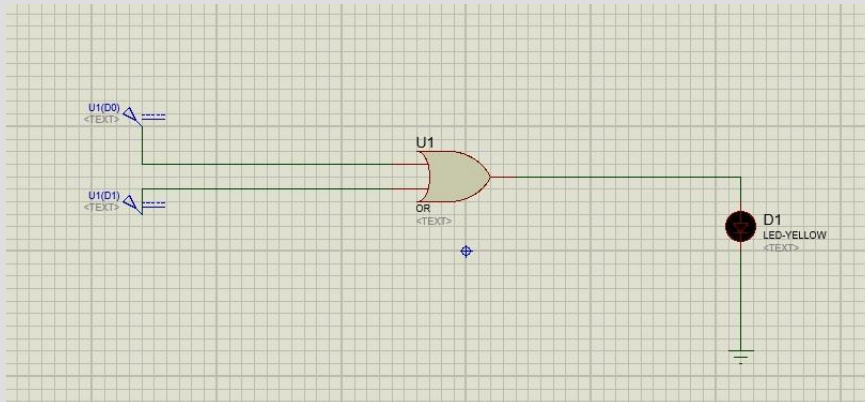
PRACTICAL 04



Step 1:

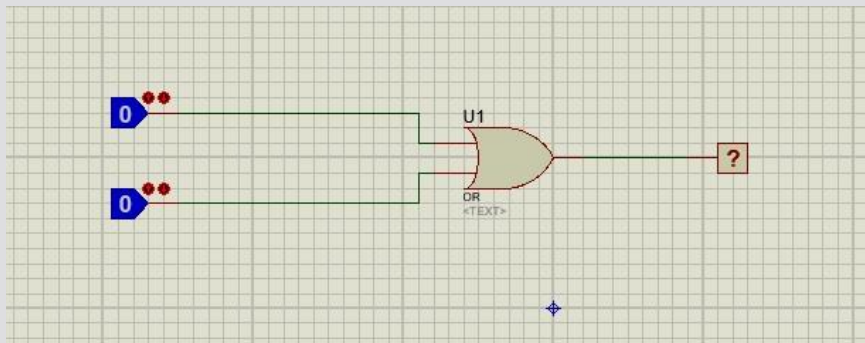
1. Open a New project.
2. As the previous put LED, Ground and Generator DC components.
3. Search “NOT” on Component Mode and put it on the window.
4. Connect component through wire clicking them.
5. Once you done connecting play it. You will see the LED is ON.

PRACTICAL 05



Step 1:

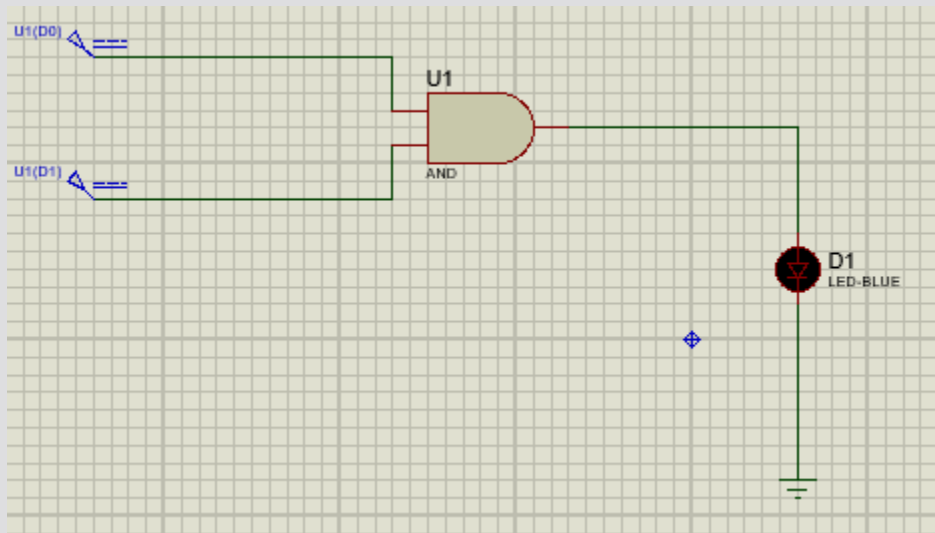
1. Open the Proteus > New Project
2. Search “**OR**” on Command mode and put it on the window.
3. Put “**DC Generator**”, LED bulb and Ground Terminal as given above.
4. You can see the inputs and output in truth table as below.



TRUTH TABLE

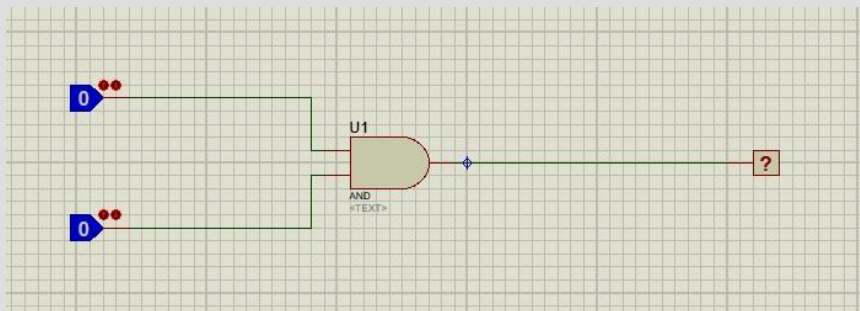
| INPUTS | | OUTPUTS |
|--------|---|---------|
| X | Y | Z |
| 0 | 1 | 1 |
| 0 | 0 | 0 |
| 1 | 1 | 1 |
| 1 | 0 | 1 |

PRACTICAL 06



Step 1:

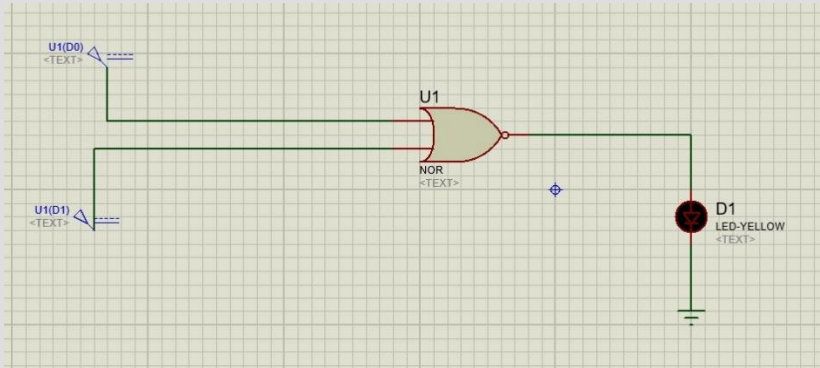
1. Open the Proteus > New Project
2. Search “AND” on Command mode and put it on the window.
3. Put “DC Generator”, LED bulb and Ground Terminal as given above.
4. You can see the inputs and output in truth table as below.



TRUTH TABLE

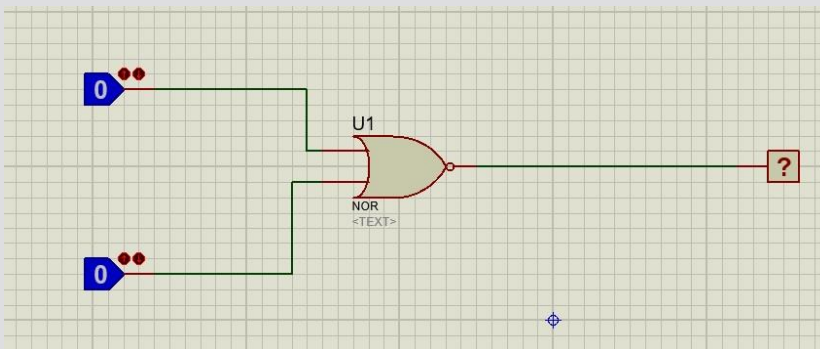
| INPUTS | | OUTPUTS |
|--------|---|---------|
| X | Y | Z |
| 0 | 1 | 0 |
| 0 | 0 | 0 |
| 1 | 1 | 1 |
| 1 | 0 | 0 |

PRACTICAL 07



Step 1:

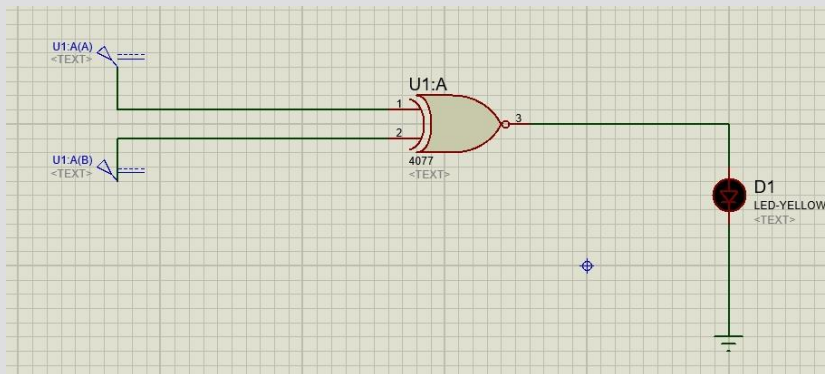
1. Open the Proteus > New Project
2. Search “NOR” on Command mode and put it on the window.
3. Put “DC Generator”, LED bulb and Ground Terminal as given above.
4. You can see the inputs and output in truth table as below.



TRUTH TABLE

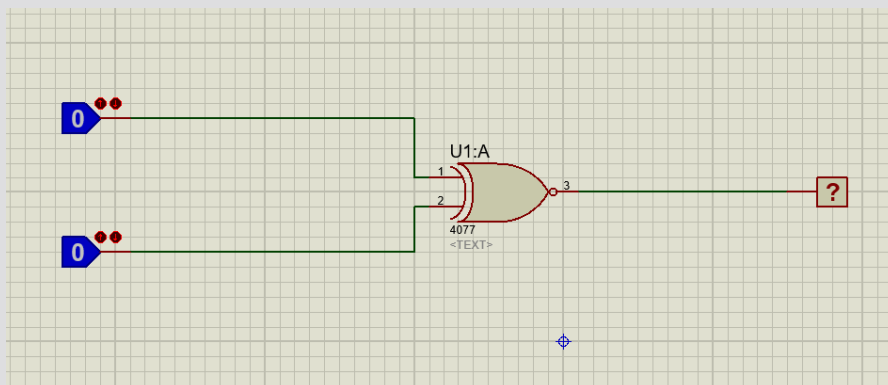
| INPUTS | | OUTPUTS |
|--------|---|---------|
| X | Y | Z |
| 0 | 1 | 0 |
| 0 | 0 | 1 |
| 1 | 1 | 0 |
| 1 | 0 | 0 |

PRACTICAL 08



Step 1:

1. Open the Proteus > New Project
2. Search “XNOR” on Command mode and put it on the window.
3. Put “DC Generator”, LED bulb and Ground Terminal as given above.
4. You can see the inputs and output in truth table as below.

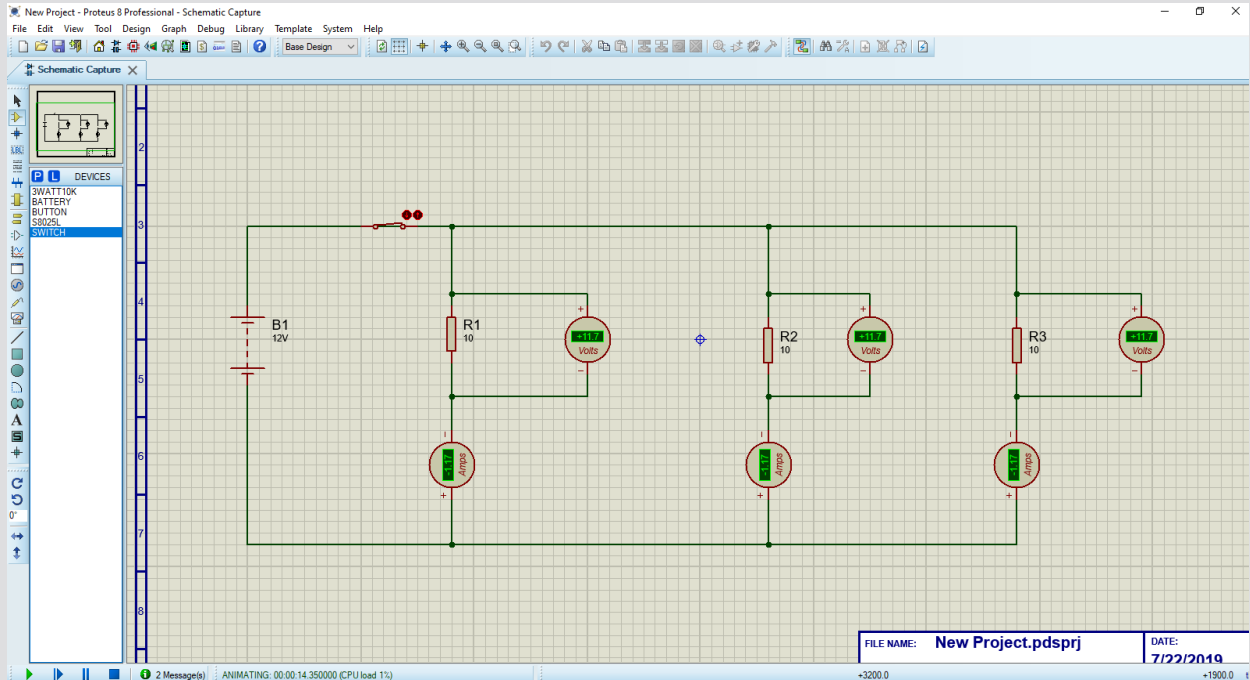


TRUTH TABLE

| INPUTS | | OUTPUTS |
|--------|---|---------|
| X | Y | Z |
| 0 | 1 | 0 |
| 0 | 0 | 1 |
| 1 | 1 | 1 |
| 1 | 0 | 0 |

PRACTICAL 10

CIRCUIT



THIS SCREENSHOT PREFERS!

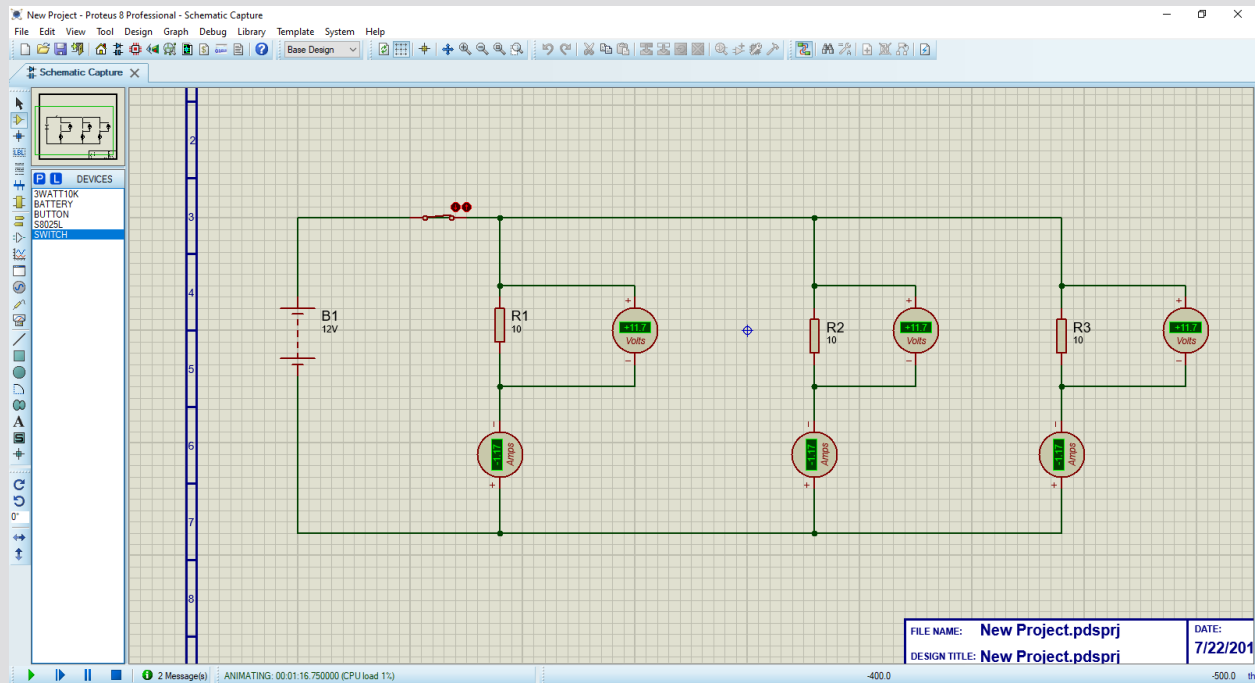
Step 1:

INSTRUMENTS

- 3WATT10K
- BATTERY
- BUTTON
- S8025L
- SWITCH

AND THEN I HAVE COMBINE IT ACCOURDINGLY.

sPRACTICAL 11



THIS SCREENSHOT PREFERS!

Step 1:

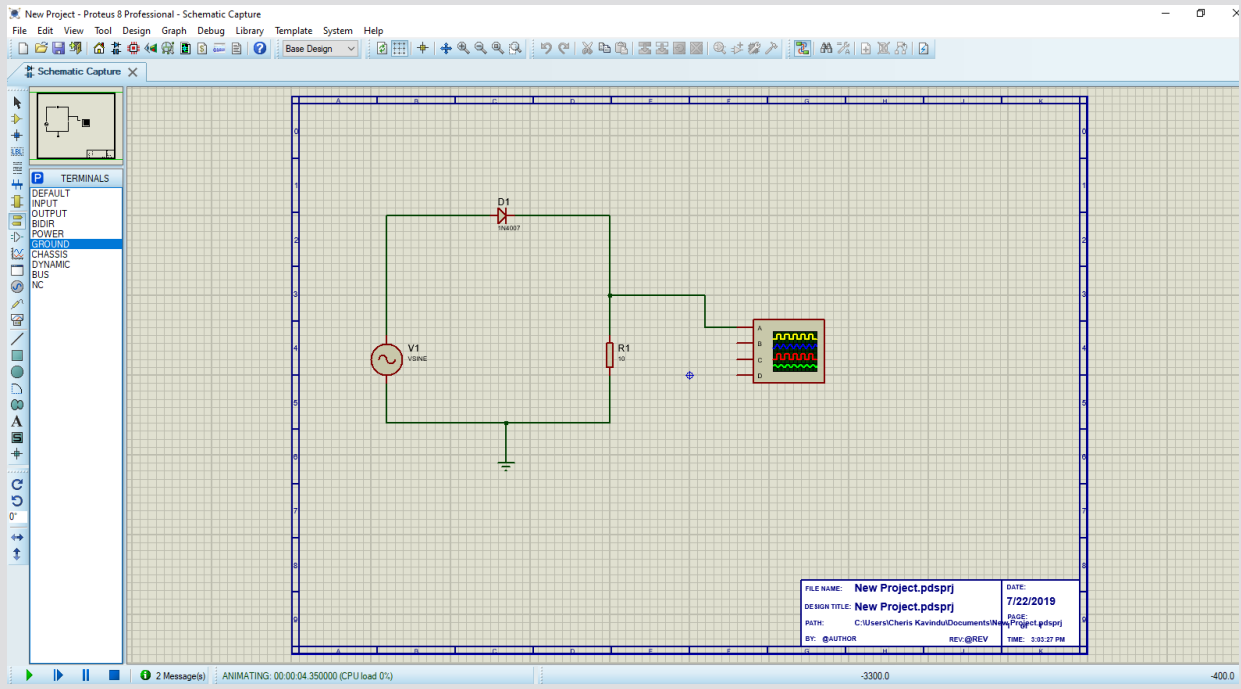
INSTRUMENTS

- 3WATT10K
- BATTERY
- BUTTON
- S8025L
- SWITCH

AND THEN I HAVE COMBINE IT ACCOURDINGLY

PRACTICAL 12

RESISTOR



THIS SCREENSHOT PREFERS!

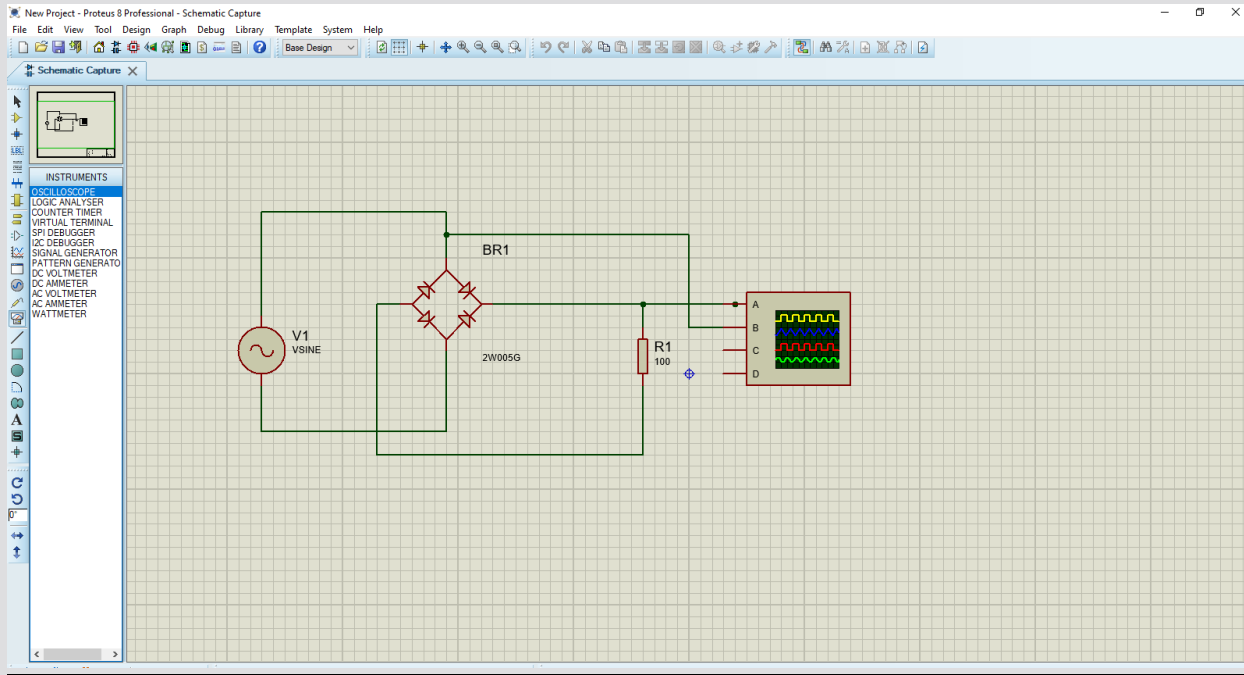
Step 1: INSTRUCTION

- DEFAULT
- INPUT
- OUTPUT
- BIDIR
- POWER
- GROUND
- CHASSIS
- DYNAMIC
- BUS
- NC

AND THEN I HAVE COMBINE IT ACCOURDINGLY.

PRACTICAL 13

Full Rectifier Virtualization Without Smoothing



THIS SCREENSHOT PREFERS!

Step 1:

INSTRUMENTS

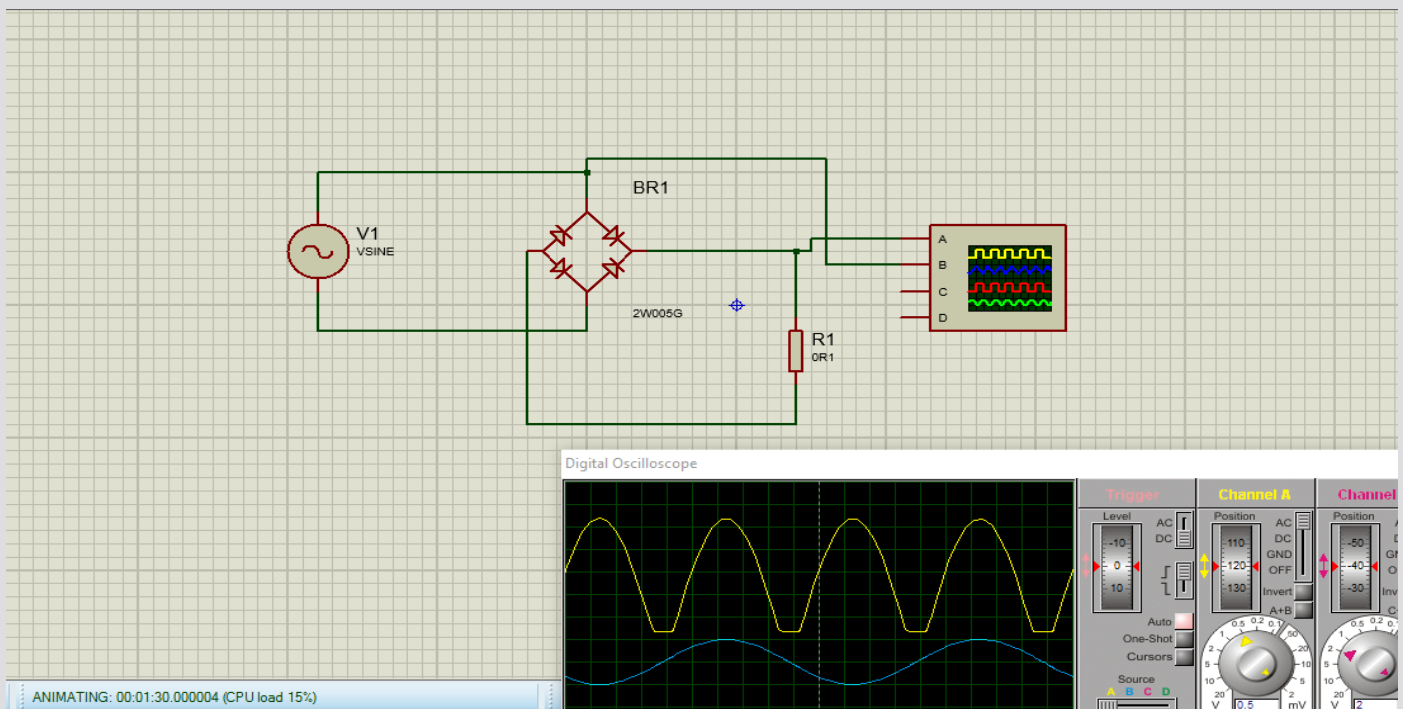
- OSCILLOSCOPE
- LOGIC ANALYSER
- COUNTER TIMER
- VIRTUAL TERMINAL
- SPI DEBUGGER
- I2C DEBUGGER
- SIGNAL GENERATOR

- PATTERN GENERATOR
- DC VOLTMETER
- DC AMMETER
- AC VOLTMETER
- AC AMMETER
- WATTMETER

AND THEN I HAVE COMBINE IT ACCOURDINGLY.

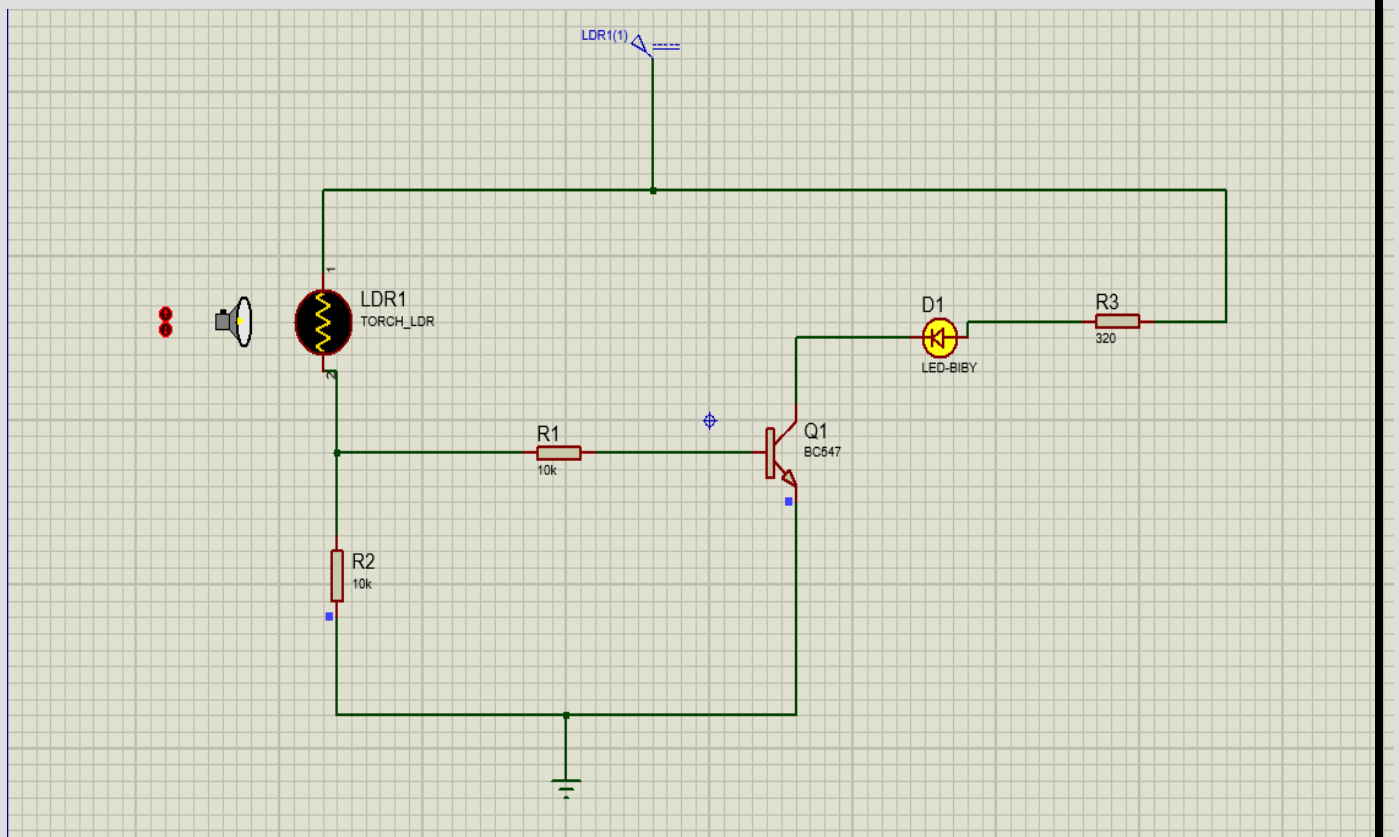
Full Rectifier Virtualization Without Smoothing

GRAPH OF THE FULL RECTIFIER



PRACTICAL 14

LDR CIRCUIT SIMULATION USING PROTEUS



THIS SCREENSHOT PREFERS!

Step 1:

INSTRUMENTS

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AND THEN I HAVE COMBINE IT ACCOURDINGLY.