

Bhavan's Vivekananda College  
Sainikpuri, Secunderabad.  
**Dept. of Physics and Electronics**  
**2018 – 19**

Dept. has organized a Field Trip to HPCL and Naval Dockyard Vishakhapatnam, A.P, with the students of B.Sc. M.P.Cs and M.E.Cs from 21-11-2018 to 25-11-2018, the objective of this visit is to understand the Science and Technology involved in the manufacturing of Black Oil and its applications.



Students of MPCs and MECs along with three faculty members from Dept. of Physics and Electronics, Mrs M Prasanna, Mrs V R Manjula and Mrs T Sai Santoshi have visited ISRO – NRSC, Jeedimetla, Hyderabad on 08 – 08 – 2018. A lecture session followed by a video presentation wherein a complete Satellite launching procedure starting from making of various modules to the final stage of launching of satellite into the orbit was shown. A crossword and quiz contest was organized; our students have bagged the first and third prizes for both the Quiz and Crossword events organized amongst the total of 900 students participating from 16 different colleges.





Department of Physics & Electronics has organized a guest lecture on “Physics in Real Life” by Prof.(Retd.) D. Suresh Babu , Dept. of Physics, Osmania University, Hyderabad on 20 – 09 – 2018.



Dept. of Physics & Electronics organized a visit to MaxiVision Eye Hospital, Dr A.S.Rao Nagar, Hyderabad. The purpose of the visit is to inculcate interest among the students and developing a deeper insight in the vision related aspects by providing them an exposure to the rectifying mechanisms used for correcting the various eye defects.



8085 Simulator - D:\8085\unit 2\programs\demofile.asm

File Edit Tools Settings Simulation Subroutine View Load Sample Program Help

Editor Assembler Registers Memory Devices

Assembler

| * Address | Label | Mnemonics | Hexcode | Bytes | M-Cycles | T-States |
|-----------|-------|-----------|---------|-------|----------|----------|
| √ 0000    |       | SUB A     | 97      | 1     | 1        | 4        |
| √ 0001    |       | MVI B,04  | 06      | 2     | 2        | 7        |
| 0002      |       |           | 04      |       |          |          |
| √ 0003    |       | MVI C,03  | 0E      | 2     | 2        | 7        |
| 0004      |       |           | 03      |       |          |          |
| √ 0005    | LOOP1 | ADD B     | 80      | 1     | 1        | 4        |
| √ 0006    |       | DCR C     | 0D      | 1     | 1        | 4        |
| √ 0007    |       | JNZ LOOP1 | C2      | 3     | 3        | 10       |
| 0008      |       |           | 05      |       |          |          |
| 0009      |       |           | 00      |       |          |          |
| √ 000A    |       | STA 9000  | 32      | 3     | 4        | 13       |
| 000B      |       |           | 00      |       |          |          |
| 000C      |       |           | 90      |       |          |          |
| √ 000D    |       | HLT       | 76      | 1     | 2        | 5        |

Simulate

Start From → 0000

Run all At a Time Step By Step

Registers :

| Register    | Value | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|-------------|-------|---|---|---|---|---|---|---|---|
| Accumulator | 00    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Register B  | 00    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Register C  | 00    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Register D  | 00    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Register E  | 00    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Register H  | 00    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Register L  | 00    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Memory(M)   | 00    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Register      | Value | S | Z | * | AC | * | P | * | CY |
|---------------|-------|---|---|---|----|---|---|---|----|
| Flag Register | 00    | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0  |

| Type                     | Value |
|--------------------------|-------|
| Stack Pointer(SP)        | 0000  |
| Memory Pointer (HL)      | 0000  |
| Program Status Word(PSW) | 0000  |
| Program Counter(PC)      | 0000  |
| Clock Cycle Counter      | 0     |
| Instruction Counter      | 0     |

| SOD | SID | INTR | TRAP | R7.5 | R6.5 | R5.5 |
|-----|-----|------|------|------|------|------|
| 0   | 0   | 0    | 0    | 0    | 0    | 0    |

For SIM instruction

| SOD | SDE | * | R7.5 | MSE | M7.5 | M6.5 | M5.5 |
|-----|-----|---|------|-----|------|------|------|
| 0   | 0   | 0 | 0    | 0   | 0    | 0    | 0    |

For RIM instruction

| SID | I7.5 | I6.5 | I5.5 | IE | M7.5 | M6.5 | M5.5 |
|-----|------|------|------|----|------|------|------|
| 0   | 0    | 0    | 0    | 0  | 0    | 0    | 0    |

No. Converter Tool :

| Hexadecimal | Decimal | Binary |
|-------------|---------|--------|
| 0           |         | 0      |

Created by : Jubin Mitra

Jubin Mitra 8085 simulator for the lab experiments demonstrations...



## Licensing

### PhET Simulations

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### PhET-iO Simulations

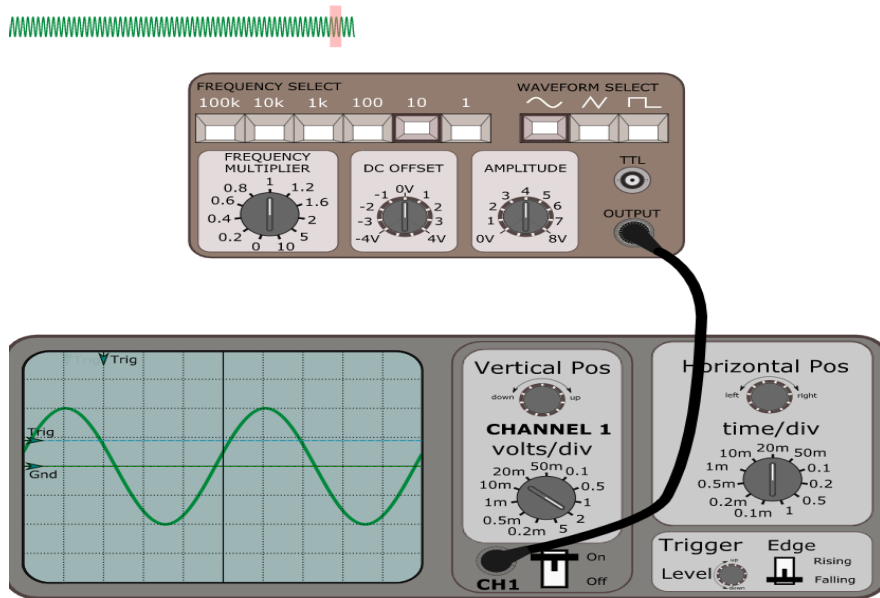
PhET's interoperable sims provide enhanced capabilities for interoperability with a wide variety of educational technology, including customization, streaming output data, and versatile API control. PhET-iO sims are a licensed product. Contact [phet-io@colorado.edu](mailto:phet-io@colorado.edu) for more information.

### Teaching Activities

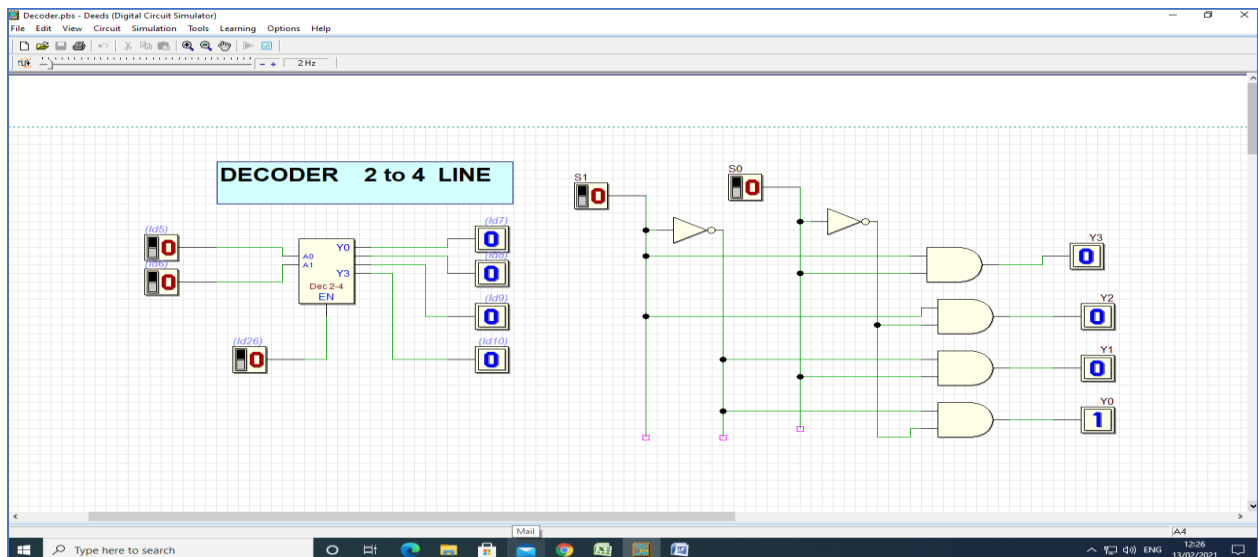
A wide variety of teaching activities have been contributed by the PhET team and its user community, and are available for you to adapt and use in your classroom. If you require a [CC-BY](#) license, please check the specific activity to see if it is available under CC-BY.

<https://www.falstad.com/circuit/>

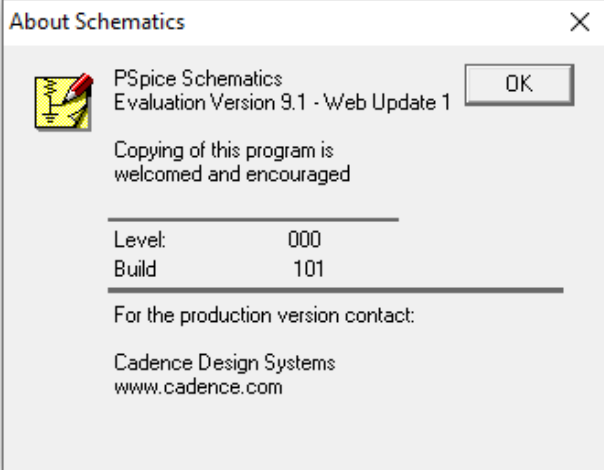
← → ↻ Not secure | eleceng.dit.ie/dsp/elab/  
Just click on any of the dials or buttons to explore how they work. 1) Check out a youtube video of the simulation in action. 2) Take by David Dorran, TU Dublin



## Deeds Digital Circuit Simulator

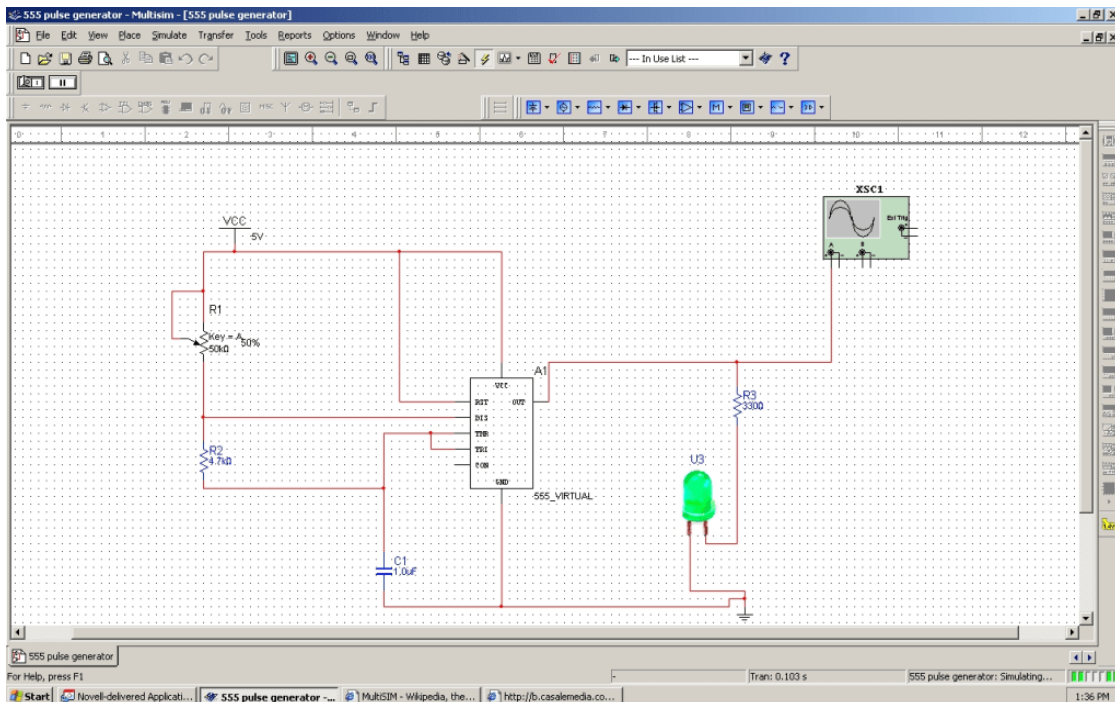


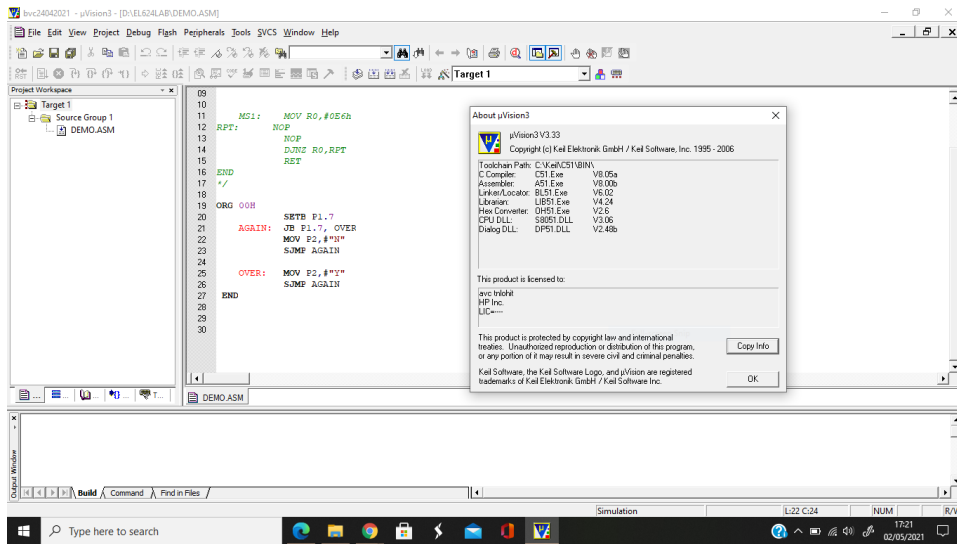




Pspice schematics 9.1 used for lab experiments

NI Multisim is an electronic schematic capture and simulation program which is part of a suite of circuit design programs, along with NI Ultiboard. Multisim is one of the few circuit design programs to employ the original Berkeley SPICE based software simulation.





keil microvision 3 v3.33