



1 The procedure to practise

1. You have been given a set of spoken tutorials and files.
2. You will typically do one tutorial at a time.
3. You may listen to a spoken tutorial and reproduce all the steps shown in the video.
4. If you find it difficult to do the above, you may consider listening to the *whole* tutorial once and then practise during the second hearing.

2 ngspice

1. Click on "Select FOSS Category" drop-down and choose "Ngspice".
2. Click on "Select Language" drop-down and choose the language "English".
3. Click on "Locate Tutorial" button.
4. You will see a list of tutorials based on your selection.
5. Start with the first tutorial in the displayed list.

3 First tutorial: Operating point analysis in ngspice

1. Locate the topic "Operating point analysis in ngspice".
2. To view the tutorial, click on the video player icon on the right of the selected topic.
3. The **Outline** of the tutorial and the **Pre-requisite** will be visible on the right of the player.
4. The links for the **Code Files** will be available below the player.
5. Click on the player and view the tutorial.

3.1 Instructions to practise on Linux OS

- (a) The tutorials are explained on the **Linux OS**.
- (b) It will be easy for the Linux users to follow as instructed in the tutorial.

3.2 Instructions to practise on Windows OS

- (a) To launch **ngspice** on Windows, locate **spice/bin** (Please see the installation sheet).
- (b) Double click on **ngspice.exe** file.
- (c) The ngspice terminal opens up, where you can write your command.

3.3 Common instructions to use Code files

- (a) At the prompt, type `cd Desktop/` and press "**Enter**".
- (b) Now type `mkdir name-rollno-ngspice` and press "**Enter**".
(Eg. `mkdir name-1-ngspice`)
- (c) This will create a folder with your "**name**" and "**rollno**" on the Desktop.
- (d) Click on the link "**Code files**" below the video player and save it in your folder.
- (e) Extract the downloaded zip file.
- (f) You will see all the code/source files used in the particular tutorial.
- (g) Use these files as per the instructions given in the particular tutorial.
- (h) Remember to save all your work in your directory.
- (i) This will ensure that your files don't get over-written by someone else.
- (j) Remember to save your work from time to time, instead of saving it at the end of the task.

6. Play-pause-practise the whole tutorial.
7. Once the tutorial is complete, click on the back button on the browser (top-left corner left-arrow button).
8. Now, choose the next tutorial "DC Sweep Analysis".

4 Second tutorial: DC Sweep Analysis

1. Play the tutorial.
2. Follow all the instructions given in the tutorial.
3. Follow the above instructions given for using the code files.