User Manual: PODEM:

The program has been built using C++. The program can be run from Linux terminal.

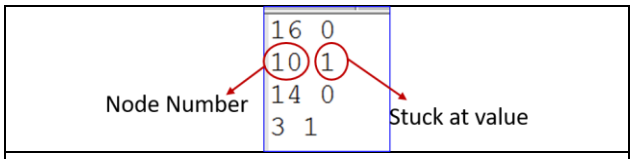
README:

1. Unzip the file ***DST_project_Mohammad_Adnaan***

2. The circuit files are kept in the following folder

    `DST_project_Mohammad_Adnaan/PODEM/files`

3. Edit the file `input_fault_list_podem.txt` kept in this folder to give input fault list for which test vector will be generated.



Input fault list file format

4. Navigate to the **src** folder of **PODEM** . All source code files are kept here.

    `DST_project_Mohammad_Adnaan/PODEM/src`

5. Run command `vi podem.cpp` and press I in the keyboard to edit the main file in order to select the circuit file and mode parameters.

6. Set the desired circuit file.

7. After setting the circuit file name press escape in keyboard, type the command `:wq` and press enter to save the changes and exit the file.

8. In the terminal run the command

```
make all
```

9. Run the following command to set execution permission for the program

```
chmod +x podem
```

10. Finally run the following command to run the deductive simulator

```
./podem
```

11. Output results are saved in the file

```
DST_project_Mohammad_Adnaan/PODEM/files/generated_tests.txt
```

12. The generated test vectors file format is as follows:

```
Test for Node 25 stuck at 1:   xxxxxxxxxxxxxxx1xxxxxxxx
Test for Node 51 stuck at 0:   00xxxxxxxxxxxxx0xxxxxxxx
Test for Node 105 stuck at 1:   101xxxx0xxxxxxxxxxxxxxxx
Test for Node 105 stuck at 0:   101xxxx1xxxxxxxxxxx0xxxx
Test for Node 83 stuck at 1:   01xx001xxx0x01x0xxxxxxxx
Test for Node 92 stuck at 0:   01xxxxx0xxxxxxxxxx0xxxxx
Test for Node 198 stuck at 0:   FAILURE
Test for Node 7 stuck at 0:   xxxxxx1xxxxxxxxxxxxxxxxx
```