

- Used ast2json tool to parse the python program and to get an ast in the form of JSON
- Visualized the JSON file with the help of tools available in these sites
 - <http://jsonviewer.stack.hu/>
 - <https://vanya.jp.net/vtree/>
- On visualizing, I found that each node can be recognized using key- `_type`
- Since we don't know exactly what type of node will be the next node during traversal, there is a need to handle each type of node individually
- Therefore I made separate functions to handle different types of statements or expression
- A kind of depth-first traversal algorithm is used to traverse the tree.
- Complete grammar is mentioned on this site
 - <https://docs.python.org/3/library/ast.html>
- Using the grammar, I traversed the whole tree and found out required statements

Instructions to run the python script:

1. Run the run.sh file
2. It will ask you to enter the test case file name (format - "filename.py") (*test case file must be in the "test cases" folder only*)
3. On entering the file name, the program will print all the assignment statements, branch conditions, and loop conditions
4. At the end, it will ask you to input your choice whether you want to continue or exit
5. Enter any key to continue or 0 to exit