## **ASSIGNMENT 1**

#### PARSER FOR A FORMAL LANGUAGE FOR ARGUMENTS IN SENTENTIAL LOGIC (FLASL)

### • How to run the assignment?

- 1. Open the smlnj compiler on the terminal
- use "load.sml";
- val parsedfileAST = parseFile "arg-inp.flasl";
- 4. use "ast2file.sml";
- 5. ast2file parsedfileAST;
- 6. use "ast2flasl.sml";
- 7. use "arg.sml";
- 8. ast2flasl arg;
- -> STEPS 1 to 3 are to parse the input flasl file "arg-inp.flasl" and load the AST of the file into a variable known as "parsedfileAST".
- -> **STEPS 4 to 5** are to write the AST of the parsed file into a file named as "arg.sml" by giving the name "arg" to the variable storing the AST.
- -> STEPS 6 to 8 are to use the AST wriiten in the variable "arg" in the file arg.sml and then convert it into flasl and store in the "arg-out.flasl" file.

### • FILES IN THE ASSIGNMENT:-

- **1. Lexer.lex** -> Stores the lexer of the language.
- **2. parser.yacc** -> Stores the parser of the language.
- **3. Interface.sml** -> Acts as an interface of the lexer and the parser file and makes variable parseFile which takes as input the address of the file and parses it to make its AST.
- **4. load.sml** -> Loads all the libraries used in this assignment and all the files used.
- **5. AST.sml** -> Stores the structure of the AST.
- 6. ast2file.sml. -> Stores the AST of the input file as a variable "arg" in a "arg.sml" file.
- 7. ast2flasl.sml. -> Converts the AST in flasl language and stores it in a file.

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