22C:050 HW #5 solutions

1.

TYP

FWD

IF

DEF

(identifier)

expression

(expression)

value

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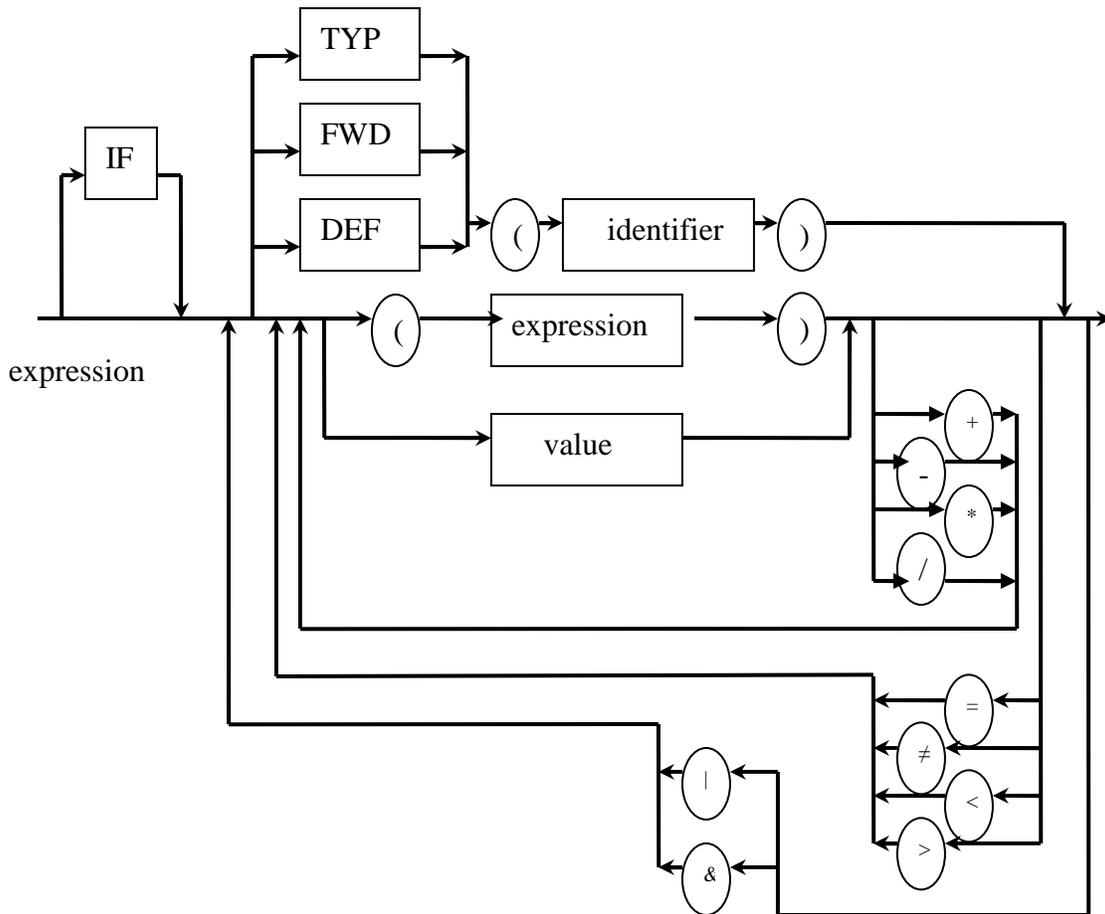
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2.   fseek() sets the file-position indicator for stream. The new position, measured in bytes from the beginning of the file, is obtained by adding offset to the position specified by whence. The specified position is the beginning of the file for SEEK_SET, the current position for SEEK_CUR, or end-of-file for SEEK_END.

　　　When an assembler parses a macro (containing loop) call, the loop body needs to repeatedly insert into source files. The function fseek can be used to moves the file pointer backward to read input lines from the beginning of the loop body to be parsed repeatedly

3. When a loop outside a macro is encountered, the pointer to the loop's starting position is pushed onto the stack and popped off once the loop terminates. In case of a loop inside a macro, the loop body is pushed onto the stack and read repeatedly until the loop terminates and the loop body popped off.

4. A,B and c are relocatable symbols, and X and Y are absolute symbols.

a) $(A+X)-Y$ relocatable
b) $(A+X)-B$ absolute
c) $(A-B)+(A-C)$ absolute
d) $(A-X)+(B-Y)$ illegal
e) $(A-B)+(A-X)$ relocatable