

1. Identify the lexical elements from a code snippet and classify them
2. Construct the list of reserved words for C. What is the difference between reserved word and keyword.
3. Constants in C
 - a. Discussion - different constants
----- BNF & EBNF
 - b. Describe in BNF integer, real, char and string constants
4. a) Consider language C - declaration description using **syntax diagrams**
b) BNF description

BNF or Backus-Naur Form

Principle: set of rules:

symbol := alternative1 | alternative2 ...

Extended Backus–Naur form (EBNF) – Nicholas Wirth

Improved / extended notation of BNF:

Usage	Notation
definition	=
concatenation	,
termination	;
alternation	
optional	[...]
repetition	{ ... }
grouping	(...)
terminal string	" ... "

BNF:

expression ::= expression "+" term | expression "-" term | term

term ::= term "*" factor | term "/" factor | factor

EBNF:

expression ::= expression ("+"|"-") term | term

or

expression ::= {expression {"+"|"-"}} term

term ::= {term {"*"|"/"}} factor

Syntax Diagrams

if_stmt

