**DAY-06**

ctags: used to find where the functions are declared

ctags -R . --->used to create index file

**Loading the index data in vi:**

vi file1.c

:set tags=<path> (last line of file)

set tags =../../tags (from main file)

Navigating: to move to next file ctrl+]

to undo :ctrl t

git

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git config credential.helper store --> first time it asks for password but later on it will not ask

**cscope**

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same as ctags

csopes stores its data in a file called cscope.out

cscope `find . -name'\*.[ch]'`

find . -name '\*.[ch]'>cscope.files

cscope -i cscope.files -->we can search and navigate

to got to that file after searching go to the number and enter

come back :q

close: ctrl+b

**gprof**

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how much perc of time is spent in diff functions

gcc -o app -pg main.c

./app ->when we run gmon.out file is produced

gprof ./app gmon.out

**gdb**

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breakpoint

watch

navigate--next/n

stepinto--step/s

**valgrind** : memory leaks

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gcc -o app main.c

valgrind -v --tool=memcheck --leak-check=full --show-reachable=yes --log-file=valclient2./app

vi valclient2

C Language

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Fast bcoz it directly feeds into system without jvm

**/\* doc section**

Description

Author

Date of creation/modification

Version: 0.1v(starts with) \*/

1.0 -->stale version base of the proj

doc section

link section

definition section: macros define/prototyping

global declaration

main

gcc -std 90: standard ncc compiling

naming variables meaningful

Alias name of structs are all caps

carriage return returns to the starting position of line

**c tokens**

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Keywords

Identifers : var name

constants

Strings

Special Symbols

Operators

"2002\0"

"2002"+2 is not po3ssible bcoz strings are converted into ascii

'2'+2 is possible ( ascii of 2 )+2

a=10

!a -->0

! means-->if high changes to low and vice versa

negatives values are also taken as high bcoz they are signed operators(symbol doesnt matter)

table using bitwise

primitive data type: char int long double

user defined : struct enum unions

derived: array function pointer

Modifiers: signed, unsigned, long short

short will be reduced to standard ncc so that it can be accessiblein any application

**Conditional /Ternary operator**

a>b?(a>c)?a:c : (b>c)?b:c

Why sizeof() is a operator but not function but looks like a function

For sizeof if we give a++ is given then it doesnot execute but printf will execute

Since it cant execute an expression it is not treated as a function