C LANGUAGE

C BASIC: -

INTRODUCTION TO C

SYNTAX OF C TURBO C OR VEVE++

FIRST C PROGRAMME

KEYWORD

DATATYPE

DENTIFRICE

YARIABLE

OPERATOR

WHAT IS C LANGUAGE?

C IS MIDDLE LEVEL PROCEDURAL ORIENTED PROGRAMING LANGUAGE DEVELOPED BY "DENNIS RITCHIE" AT AT,S & T BELL LABORATORIES IS THE YEAR 1972 IN USA.SUPPORT HIGH LEVEL AND MACHINE LEVEL LANGUAGE.

ANY PROGRAMMING LANGUAGE CAN BE DIVIDED IN TWO CATEGORIES,

PROGRAMING ORIENTED(HIGH LEVEL LANGUAGE)

MACHINE ORIENTED(LOW LEVEL LANGUAGE)

BUT C IS CONSIDERED AS A (MIDDLE LEVEL LANGUAGE) C IS MODULAR,PORTABLE,REUSABLE.)

INCLUDE<STDIO:H>

#INCLUDE <CONIO:H>

FEATURE OF C PROGRAMME:-

STRUCTURED LANGUAGE

- IT HAS THE ABILITY TO DIVIDE AND HIDE ALL THE INFORMATION AND INSTRUCTION.
- CODE CAN BE PARTITIONED IN C USING FUNCTIONS OR CODE BLACK.
- C IS A WELL STRUCTURED LANGUAGE COMPARE TO OTHER.

GENERAL PURPOSE LANGUAGE:-

MAKE IT IDEAL LANGUAGE FOR SYSTEM PROGRAMMING .
- IT CAN ALSO BE USED FOR BUSINESS AND SCIENTIFIC APPLICATION.
- ANSI(AMERICAN NATIONAL STANDARDS INSTITUTE) ESTABLISHED A STANDARD FOR C IN 1983.
- THE ABILITIES OF C IS TO MANIPULATE BITS, BYTE AND ADDRESSES.
- IT IS ADOPTED IN LATER 1990.

PORTABILITY: -

- PORTABILITY IS THE ABILITY TO PART OR USE THE SOFTWARE WRITTEN.
- ONE COMPUTER C PROGRAMME CAN BE REUSED.

- BY MODIFICATION OR NO MODIFICATION.

CODE RE USABILITY & ABILITY TO CUSTOMIZE AND EXTEND:-

A PROGRAMME CAN EASILY CREATE HIS OWN FUNCTION.

IT CAN BE USED REPEATEDLY IN DIFFERENT APPLICATION.

C PROGRAMME BASICALLY COLLECTION OF FUNCTION.

THE FUNCTIONS ARE SUPPORTED BY "C" LIBRARY.

FUNCTION CAN BE ADDED TO "C" LIBRARY CONTINUALLY.

LIMITED NUMBER OF KEYWORDS:-

THERE ARE ONLY 32 KEYWORDS IN 'C'

27 KEYBOARDS ARE GIVEN BY RITCHIE

5 IS ADDED BY ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)

THE STRENGTH OF 'C' IS AS LIES IN – BUILT FUNCTION

UNIOR SYSTEM PROVIDES AS LARGE NUMBER OF C FUNCTION

SOME FUNCTION ARE USED IN OPERATION

OTHER ARE FOR SPECIALIZED IN THEIR APPLICATION

C KEYWORDS:-

KEYWORDS ARE THE WORDS WHOSE MEANING HAS ALREADY BEEN

ENPLANED TO THE 'C' COMPILER THERE ARE ONLY 32 KEYWORD AVAILABLE IN C THE KEYBOARDS ARE CALLED 'RESERVED WORDS'

CASE	ENUM	REGISTER	TYPEDEF

CHOR	EXTERN	RETURN	UNION
CONST	FLOAT	SHOUT	UNSIGNED
CONTINUE	FOR	SIGNED	VOID
DEFAULT	GOTO	SIZE OF	VOLATILE
DO	IF	STATIC	WHILE

RULER FOR WRITING ,COMPILING AND EXECUTING THE C PROGRAM :-

.C IS CASE SEMITIRE MEANS VARIABLE NAME "COUNTER"IS DIFFERENT FROM A VARIABLE NAMED "COUNTER"

.ALL KEYWORDS ARE LOWERCASE.

.KEYWORDS CANNOT BE USED FOR ANY OTHER PURPOSE (LIKE VARIABLE NAMES)

.EVERY C STATEMENT MUST AND WITH A; THIS IS ACTS AS A STATEMENT TERMINATOR .

.FIRST CHARACTER MUST BE AN ALPHABET OR UNDERSCORE ,NO SPECIAL SYMBOL OTHER THAN AN UNDERSCORE ,NO COMMAS OR BLANK SPACES ARE ALLOWED WITHIN A VARIABLE CONSTANT OR

KEYBOARD.

.BLANK SPECS MAY BE INSERTED BETWEEN TWO WORDS TO IMPROVE THE READABILITY OF THE STATEMENT .HOWEVER NO BLANK SPECS ARE ALLOWED WITHIN A VARIABLE ,CONSTANT OR KEYWORD.

.VARIABLE MUST BE DECLARED BEFORE IT IS USED IN THE PROGRAM

.FILE SHOULD BE HAVE THE EXTENSION. C

.PROGRAM NEED TO BE COMPILED BEFORE EXECUTION

C CHARACTER SET

A CHARACTER DENOTES ANY ALPHABET,DIGIT OR SPECIAL SYMBOL USED TO REPRESENT INFORMATION FOLLOWING ARE THE VALID ALPHABETS NUMBERS AND SPECIAL SYMBOLS ALLOWED IN C.

ALPHABETS-A,B,.... Y,Z a,b....yz

DIGITS   -0,1,2,3,4,5,6,7,8,9

SPECIAL SYMBOLS -, ',:@,#,%,,A,&,*,( ),-,+,=,/,\

(),( );::; ,"< >,., .,? ,/

SHORTCUT KEY

1.STEP OVER—F8

2.COMPILE—ALT+F9

3. MAKE—- F9

4.INSPECT—-ALT+F4

5.EVALUATE/MODIFY—-CTRL+F4

6. SIZE/MOVE—--CTRL+F5

7. ZOOM—----F5

8. NEXT—--F6

9. CLOSE—--ALT+F3

10.USER SEREEN—--ALT+F5

11. OPEN—F3

12. SAVE—F2

13.QUIT—ALTR_+X

14. UNDO—ALT+BKSP

15.REDO—--SHIFT+ALT+BKSP

16.CUT—-SHIFT+DEL

17.COPY—--CTRL+INS

18. PASTE—--SHIFT+INS

19.CLEAR—-CTRL+DEL

20.SEARCH AGAIN—--CTRL+L

21.PREVIOUS ERROR—--ALT+F8

22. NENT ERROR–ALT+F9

23.RUN-CTRL+F9

24.PROGRAMME RESET—-CTRL+F2

25.GO TO CURROR–F4

26.TRACC INTO–F7

EXTENSION NAME OF HEADER FILE .H

STDIO - STANDER INPUT OUTPUT

CONIO- CONSTENT INPUT OUTPUT

TO PRINT ANY TEXT

{ CLRSCR();

PRINTF ("WELCOME TO C PROGRAM");

GETCH();

}

CLRSCR()-CLEAR SCREEN

GETCH()-TO HOLD OUTPUT SCREEN .TO RUN PRESS

LINE BREAKER-\N

FOR LOOP-A FOR LOOP IS A REPETITION CONTROL STRUCTURE THAT ALLOWS YOU TO EFFICIENTLY WRITE A LOOP THAT NEEDS TO EXECUTE A SPECIFIC NUMBER OF TIMES.

SYNTAX- THE SYNTAX OF A FOR LOOP IN C PROGRAMING

 LANGUAGE IS -

FOR (INIT; CONDITION ; INCREMENT)

{

STATEMENT(SL)

}

FOR LOOP

INCLUDE<STDIO:H>

#INCLUDE <CONIO:H>

INT MAIN()

{

INT A;

FOR (A=10;A<20;A=A+1)

{

PRINT F("A=%D\N",A);

}

GETCH();

RETURN0;

}

BREAK STATEMENT

THE BREAK STATEMENT IS C PROGRAMING HAS THE FOLLOWING TWO USAGE:-

WHEN A BREAK STATEMENT IS ENCONTERED INSIDE A LOOP , THE LOOP IS IMMEDIATELY.

TERMINATED AND THE PROGRAM CONTROL RESUMES AT THE NEXT STATEMENT FOLLOWING THE LOOP.

IT CAN BE USED TO TERMINATE A CASE IN THE SWITCH STATEMENT

(COVERED IN THE NEXT CHAPTER).

IF YOU ARE USING NESTED LOOPS, THE BREAK STATEMENT WILL STOP THE EXECUTION OF THE INNERMOST LOOP AND START EXECUTING THE NEXT LINE OF CODE AFTER THE BLOCK.