Different elements and aspects of programming in these languages

keywords (predefined and reserved word associated meaning with them) and identifiers (name given to c constructs) in C language

Keywords

-keywords are written in lowercase.

These are auto, double, int, struct, break, else, long, switch, case, enum, register, typedef,

char, extern, return, union, continue, for, signed, void, do, if, static, while, default, goto, sizeof, volatile, constant, float, short, unsigned.

C identifiers

Identifiers declared using C keywords.

These are case sensitive and contains alphanumeric and underscore (can't start from digit)

Ex: char gn_10;

C variables (store value assigned to variables)

Used to preserve value and use it later.

Syntax: <datatype> <variable1>, <variable2>, <variable3>;

Ex: char name, gender;

C data types

Tells compiler what kind of variables has been declared.

-provide size and type of data

2 types of data types

1. Primitive/Basic data type
   Int-integer, float-store real numbers, double-store real no with high precision, char-single character, void-no value (used for mentioning function return)
2. User defined data type
   i.   Array
   Ex: int num[10]; #num is an array of 10 elements of integer type.
   ii.   Structure :represent different kinds of data type as single record.

   Ex: struct {

           int name,   //name is of integer type

           float marks   //marks of float type

           } result;   // 'result' is structure having two members

   iii.   Union

C Input/Output

How to display output on screen?

Library functions to display data on screen. eg. Printf(), putchar(), putc(),

Syntax for printf():

Printf(<format_specifier_string>,<comma separated list of variabes>);

,format_specifier_string>: format in which you want to display the data (%d, %c, %f, %s)

<comma_separated_list_of_variables> : variables to be displayed corresponding to format notations specified in string

Ex: num=6;

printf("%d", num); //display no on screen

retutn 0;

How to read input entered by keyboards?

Different library function to read data entered by keyboards: scanf(), getchar(), getc()

Syntax for scanf()

scanf(<format_specifier_string>, <comma_separated_list_of_address_of_variables>);

<format_specifier_string> : format in which you want to read the data (%d, %c, %f, %s)

Ex: Scanf("%d", &num); //read integer value in variable 'num'.

C operators

Performs various operation on variables or data to generate new results

Arithmetic operators: +,-,*,/,%

Logical operators: ||,&&, !

Relational operators: !=,==,>,<,>=,<=

Ex: int num1, num2;

scanf("%d", &num1);

scanf("%d", &num2);

mul=num1*num2;

printf("%d", mul);

If…..else statement

Syntax

If (condition){

Operation to perform if condition is true

}

else {

operation to perform for false condition

}