**RULES FOR DEFINING VARIABLES IN C :**

1. Every variable should start with either alphabet or underscore ( \_ ) .
2. No spaces are allowed in the variable declaration .

Eg : int num 1 =50 is invalid;

1. Except underscore ( \_ ) , no other special characters are allowed in variable declaration.

Eg : candidate-name is invalid;

candidate\_name is valid;

1. Characters should be on left side while giving an value to variable.

Eg : int a = 10 is valid

Int a;

10 = a; is invalid

1. No keywords should be used as variable name .

Eg : for , delete , continue …

1. Characters allowed are :

* Underscore ( \_ ),
* Capital letters ( A-Z ),
* Small letters ( a-z ),
* Digits ( 0-9 ).

1. Maximum length of characters allowed in a variable depends on compiler.

**DIFFERENCES BETWEEN DOUBLE AND FLOAT :**

|  |  |
| --- | --- |
| FLOAT | DOUBLE |
| Floating point number is an extension of fixed-point numbers. A floating point number adds an exponent . | It has double precision than floating point number. |
| It occupies 4 bytes or 32 bits.  Sign bit- 1 indicates negative,0 indicates positive.  Exponent-8 bits; significand precision-23 bits. | It occupies 8 bytes or 64 bits.  Sign bit- 1 indicates negative,0 indicates positive.  Exponent-11 bits ;significand precision-52bits. |
| Float has 7 decimal digits of precesion. | Double has 15 decimal digits of precesion. |
| 2.5 is stored as float. | 2.3 is stored as double |