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RULES:-

* A variable name can be any combination of 1 to 8 alphabets, digits or underscore.
* The first character must be an alphabet or an underscore
* The length of the variable cannot exceed upto 8 characters long, and some of the 'C' compilers can be recognized upto 31 character long.
* No commas or blank spaces are allowed within a variable name.
* No special symbol, an underscore can be used in a variable name.

Use and Name the meaningful and intelligent variable names.

VARIABLE DECLARATION :-

After designing suitable variable names, we must declare them in a program, and this declaration tells the computer compiler what the variable name and type of the data that the variable will hold.

SYNTAX :- data_type V1, V2, V3, ..., Vn;

where data_type → type of the data

V1, V2, V3, ..., Vn → are the list of variables.

Eg :-
```
int code;
char gender;
float price;
char name[10];
```

Here the variables, code is type of integer, gender is type of character, price is type of float and name[10] is defined an array of character.

The data item must be assigned to the variable at some part of the program. The data item can then be accessed later in the program simply by referring to the variable name.

There are two types of variables.

1) Numeric variables (int & float)

2) character variables.

Initialization of variables:-

```
int emp_num = 10;
float salary = 500.75;
char grade = 'A';
```

Data types	control string
integer	%d
float	%f
character	%c
string	%s
double	%lf

NOTE:-

When variables are declared but not initialized, they usually contain garbage values.