

structures & union: In C-programming a struct is called under a single name. To define struct keyword is used.

syntax:

```
struct structure name
{
    datatype member 1;
    datatype member 2;
};
```

⇒ working with structure: A special data type available in C that allows to store diff data type.

syntax:

```
union union name
{
    datatype member 1;
    datatype member 2;
};
```

⇒ memory management: working with memory, the malloc function.

syntax:

$ptr = (\text{cast} - \text{type}^*) \text{ malloc}(\text{byte} - \text{size})$

⇒ calloc & realloc: used to dynamically allocate the specified type. It initialize each block with default value.

Syntax:

$ptr = (\text{cast-type}^*) \text{calloc}(n, \text{element-size});$

The statement allocated contiguous space in memory for n elements each with the size of the float.

realloc: used to dynamically change the memory allocation of a previously allocated memory.

Syntax:

$ptr = \text{realloc}(ptr, \text{newsize});$

⇒ dynamic strings & Arrays: if allocated found in array & size are set

If the array needs to grow, realloc is used to extend it automatically. Give a char^* to a dynamic string. It is possible to reach the array looking for the corresponding element.