

Forenoon Session

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Course: C programming

USN: 4AL18EC05

Report:

⇒ Structures & Unions: In C-programming, a struct is called under a single name. To define struct, keyword is used.

Syntax:

```
struct structurename
```

```
{
```

```
    datatype member1;
```

```
    datatype member2;
```

```
};
```

⇒ Working with Structures: A special datatype available in C that allows to store different datatypes.

Syntax:

```
union unionname
```

```
{
```

```
    data type member1;
```

```
    datatype member2;
```

```
};
```

⇒ Memory Management: Working with memory, The Malloc function

Syntax:

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

⇒ Calloc & Realloc : used to dynamically allocate the specified type. It initializes each block with default value

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

The statement allocated contiguous space in memory for 25 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: is allocated found in the array & its 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 scan the array looking for the corresponding element.