Data Structure

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What is Structure?

Structure is user-defined data type which can store information with different data types together.

Structure Declaration

```
struct struct-name
{
        Data-type var_name;
        Data-type var_name;
        Data-type var_name;
        ……..
};
```

Initialization of Structures

```
struct struct-name
{
        Data-type var_name;
        Data-type var_name;
        Data-type var_name;
        ……..
}struct_var={constant1, constant2, constat3, ……};
```

Initialization of Structures (Cont …)

```
struct struct-name
{
        Data-type var_name;
        Data-type var_name;
        Data-type var_name;
        ……..
};
struct  struct_name  struct_var={constant1, constant2, constant3, …….} ;
```

Accessing the members of the structure

struct_var.member_name

i.e. Structure name is “data”

Name & Number are variables name

```
data.Name=Student
data.Number=1234
scanf(“%s”,data.Name);
scanf(“%d”,&data.Number);
printf(“%s”,data.Name);
printf(“%d”,data.Number);
```

Nested Structures

```
struct struct-name1
{
        Data-type var_name;
        Data-type var_name;
        Data-type var_name;
        ……..
};
struct struct-name2
{
        Data-type var_name;
        Data-type var_name;
        Data-type var_name;
        struct struct-name1 struct_var1;
};
struct struct_name2 struct_var2;
```