

⑤ Structure within Structure [Nested Structure]. (X) $\frac{u}{m}$

- Nested Structure in 'C' is nothing but Structure within Structure.
- One structure can be declared inside another structure as a member of another structure.

Syntax:

```
struct structure 1  
{  
    member of structure 1;  
};
```

```
struct structure 2
```

```
{  
    member of structure 2;  
};
```

```
struct structure 1, variable;
```

```
{  
};
```

Ex: struct College

```
{  
    int Cid;
```

```
    char name[50];  
};
```

```
struct Student
```

```
{  
    int rollno;
```

```
    char name[20];
```

```
    float Percentage;
```

```
    struct College cly;
```

```
};
```

example: Of Structure within Structure.

```
#include <stdio.h>
#include <conio.h>
struct college
{
    int cid;
    char cname[50];
};

struct Student
{
    int rollno;
    char sname[50];
    float percentage;
    struct college clg;
};

void main()
{
    struct Student std = { 654, "Sai", 97.5, { 123, "SNSCE" } };

    clrscr();

    printf("Student roll number is %d\n", std.rollno);
    printf("Student name is %s\n", std.sname);
    printf("Student percentage is %f\n", std.percentage);
    printf("College id is %d\n", std.clg.cid);
    printf("College name is %s\n", std.clg.cname);

    getch();
}
```

O/P

Student roll number is : 654
Student name is : Sai
Student percentage is : 97.5
College id is : 123
College name is : SNSCE