Aim:

Write a program to print student details using **nested structures** .

The structure [student] contains the fields regdno, name and date. [Date] is the nested structure and it contains the fields day, month and year.

At the time of execution, the program should print the following messages one by one on the console as:

```
Enter student number :
Enter student name :
Enter date of joining :
```

For example, if the user gives the **input** as:

```
Enter student number : 1002
Enter student name : Saraswathi
Enter date of joining : 31 01 2019
```

then the program should **print** the result as:

```
The student details are :
Number : 1002
Name : Saraswathi
Date of joining : 31-1-2019
```

Note - 1: Do use the **printf()** function with a **newline** character (\n).

Note - 2: Write the functions **read()** and **display()** in [NestedStructureFunctions.c]

Source Code :

NestedStructureMain.c

```c
#include <stdio.h>
struct student {
    int regdno;
    char name[30];
    struct date {
        int day;
        int month;
        int year;
    } doj;
};
#include "NestedStructureFunctions.c"
void main() {
    int i;
    struct student s;
    read(&s);
    printf("The student details are : \n");
    display(s);
}
```

NestedStructureFunctions.c

```c
void read(struct student*s);
void display (struct student p);
void read (struct student*s)
{
    printf("Enter student number : ");
    scanf("%d",&s->regdno);
    printf("Enter student name : ");
    scanf("%s",&s->name);
    printf("Enter date of joining : ");
    scanf("%d%d%d",&s->doj.day,&s->doj.month,&s->doj.year);
}
void display(struct student s)
{
    printf("Number : %d\n",s.regdno);
    printf("Name : %s\n",s.name);
    printf("Date of joining : %d-%d-%d\n",s.doj.day,s.doj.month,s.doj.year);
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter student number : 1001
Enter student name : Sachin
Enter date of joining : 12 06 1987
The student details are :
Number : 1001
Name : Sachin
Date of joining : 12-6-1987

Test Case - 2
User Output
Enter student number : 2001
Enter student name : Lakshmi
Enter date of joining : 15 08 2018
The student details are :
Number : 2001
Name : Lakshmi
Date of joining : 15-8-2018