Structure

Structure:- It is a collection of different-different data type is called a structures.

Syntax:-

```
struct structure-name;
{
data-type member-name_1;
data-type member-name_2;
....
....
data-type member-name_n;
} structure_name object;
```

Example 1:-Write a program for structure book.

Solution:-

```
#include<stdio.h>
int main()
{
struct Book
    {
        char bname[20];
```

```c
        char author[20];

        float prize;

        int pages;

    };
struct Book b;

    printf("Please put book name ");

    scanf("%s",&b.bname);

    printf("Please put Author name ");

    scanf("%s",&b.author);

    printf("Please put Prize ");

    scanf("%f",&b.prize);

    printf("Please put Pages ");

    scanf("%i",&b.pages);

    printf("\n");

    printf("\a ***************** \a\n");

    printf("Book name is%s ",b.bname);

    printf("\nBook author name is %s ",b.author);

    printf("\nBook prize is %f ",b.prize);

    printf("\nBook pages is %i ",b.pages);

  return 0;

}
```

Output:-

Please put book name c++

Please put Author name Abhinav Jain

Please put Prize 425.0

Please put Pages 567

****

Book name is c++

Book author name is Abhivav Jain

Book prize is 425.0000

Book pages is 567

*Example 2:-*Write a program to 2 book structure.

Solution:-

```
#include<stdio.h>
int main()
{
    struct Book
    {
        char bname[20];
        char author[20];
```

```c
        float prize;

        int pages;

    };
struct Book b;
for(int i=0;i<5;i++)
{
    printf("Please put book name ");
    scanf("%s",&b.bname);
printf("Please put Author name ");
    scanf("%s",&b.author);
    printf("Please put Prize ");
    scanf("%f",&b.prize);
    printf("Please put Pages ");
    scanf("%i",&b.pages);
    printf("\n");
    printf("\a ***************** \a\n");
    printf("Book name is%s ",b.bname);
  printf("\nBook author name is %s ",b.author);
  printf("\nBook name is %f ",b.prize);
  printf("\nBook name %i ",b.pages);
  printf("\n");
printf("\a##############################\a\n");
```

```
            }
         return 0;
            }
```

Output:-

Please put book name c++

Please put Author name Abhinav Jain

Please put Prize 425.0

Please put Pages 567

****

Book name is c++

Book author name is Abhivav Jain

Book prize is 425.0000

Book pages is 567

###################################

Please put book name c++

Please put Author name Abhinav Jain

Please put Prize 425.0

Please put Pages 567

****

Book name is c++

Book author name is Abhivav Jain

Book prize is 425.0000

Book pages is 567