NAME:SRINISHA S

ROLL NO:RA2111017010022

DEPT:EIE

TOPIC: **INVENTORY MANAGEMENT SYSTEM**

C PROGRAM TO STORE INVENTORY SYSTEM USING STRUCTURES

- ✓ The project inventory management system explains how to create a system’s user interface without using the C Graphics library.
- ✓ In order to define inventory items, the program uses the idea of **structures.**
- ✓ It also employs several C concepts, such as file operations, looping and branching constructs, and string manipulation routines, to great use.

Features of Inventory Management System

- **Add Product –** For the add product, the user can add products details.
- **View Products –** For the view product, the user can view all the new products added.
- **Delete Product –** For the delete product, the user can delete their product information.
- **Modify Products –** For the modify products, the user can modify products information.
- **Exit –** For the exit, the user can also exit in the system.

Structure is a collection of different datatype variables, grouped together under a single name.

Features of structure

The features of structure in the C programming language are as follows,

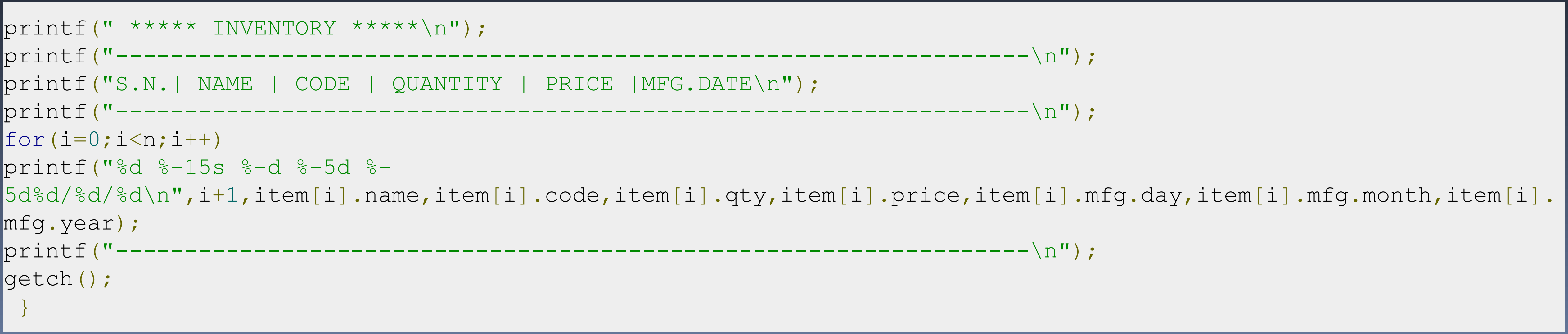
- ❑ It is possible to copy the contents of all the structure elements of different datatypes to another structure variable of its type by using an assignment operator.
- ❑ For handling the complex datatypes, it is better to create structure within another structure, which is called nested structures.
- ❑ It is possible to pass an entire structure, individual elements of structure and an address of structure to a function.
- ❑ It is possible to create structure pointers.

Program

Following is the C program **to store an inventory system by using the structures**,

```
#include<stdio.h>
#include<conio.h>
 void main(){
    struct date{
       int day;
       int month;
       int year;
    };
    struct details{
       char name[20];
       int price;
       int code;
       int qty;
       struct date mfg;
    };
```

```
struct details item[50];
    int n,i;
    printf("Enter number of items:");
    scanf("%d",&n);
    fflush(stdin);
    for(i=0;i<n;i++){
       fflush(stdin);
       printf("Item name:");
       scanf("%s",item[i].name);
       fflush(stdin);
       printf("Item code:");
       scanf("%d",&item[i].code);
       fflush(stdin);
       printf("Quantity:");
       scanf("%d",&item[i].qty);
       fflush(stdin);
       printf("price:");
       scanf("%d",&item[i].price);
       fflush(stdin);
       printf("Manufacturing date(dd-mm-yyyy):");
       scanf("%d-%d-%d",&item[i].mfg.day,&item[i].mfg.month,&item[i].mfg.year);
    }
```

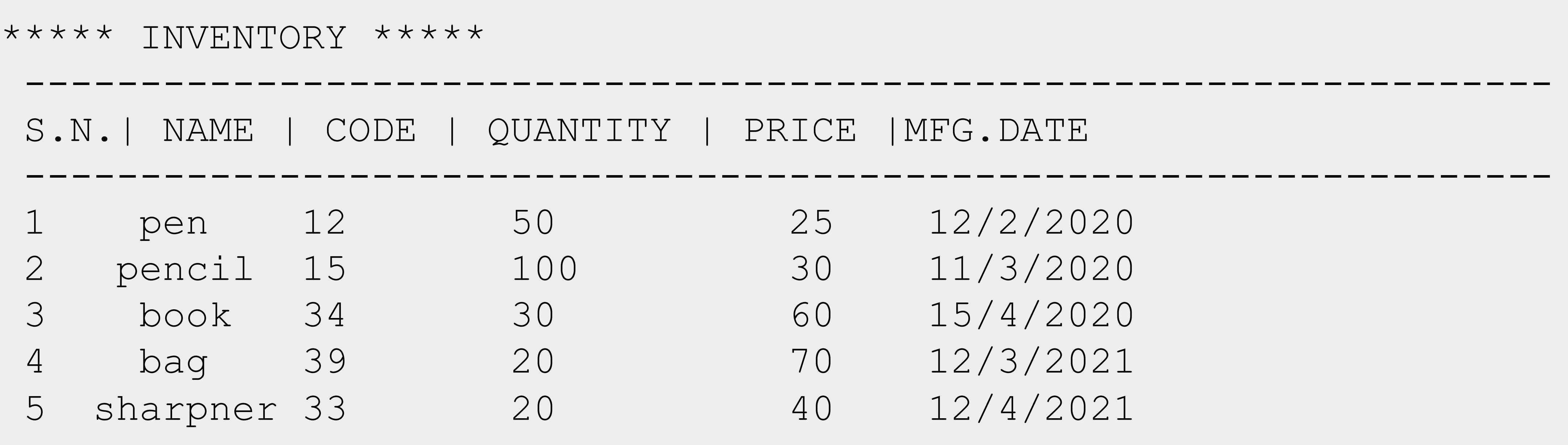


```c
printf(" ***** INVENTORY *****\n");
printf("------------------------------------------------------------------\n");
printf("S.N.| NAME | CODE | QUANTITY | PRICE |MFG.DATE\n");
printf("------------------------------------------------------------------\n");
for(i=0;i<n;i++)
printf("%d %-15s %-d %-5d %-
5d%d/%d/%d\n",i+1,item[i].name,item[i].code,item[i].qty,item[i].price,item[i].mfg.day,item[i].mfg.month,item[i].
mfg.year);
printf("------------------------------------------------------------------\n");
getch();
 }
```

Output

When the above program is executed, it produces the following result −

```
Enter number of items:5
 Item name:pen
 Item code:12
 Quantity:50
 price:25
 Manufacturing date(dd-mm-yyyy):12-02-2020
 Item name:pencil
 Item code:15
 Quantity:100
 price:30
 Manufacturing date(dd-mm-yyyy):11-03-2020
 Item name:book
 Item code:34
 Quantity:30
 price:60
 Manufacturing date(dd-mm-yyyy):15-04-2020
 Item name:bag
 Item code:39
 Quantity:20
 price:70
 Manufacturing date(dd-mm-yyyy):12-03-2021
 Item name:sharpner
 Item code:33
 Quantity:20
 price:40
 Manufacturing date(dd-mm-yyyy):12-04-2021
```



```
***** INVENTORY *****
 ------------------------------------------------------------------
 S.N.| NAME | CODE | QUANTITY | PRICE |MFG.DATE
 ------------------------------------------------------------------
 1    pen    12       50          25    12/2/2020
 2   pencil  15       100         30    11/3/2020
 3    book   34       30          60    15/4/2020
 4    bag    39       20          70    12/3/2021
 5  sharpner 33       20          40    12/4/2021
```