

(Q) Create a structure `ItemDetails` with members  
 item name, quantity & price, total amount . Calculate  
 party expenses .

```

⇒ #include <stdio.h>
struct ItemDetails {
    char itemname[20];
    int quantity;
    int price;
};

int main() {
    int n, i, ta, te;
    printf("Enter total numbers for items (%d)", n);
    scanf("%d", &n);
    for (i = 0; i < n; i++) {
        printf("Enter item name\n");
        scanf(" %s", &itemname[i]);
        printf("Enter your quantity\n");
        scanf(" %d", &quant[i].quantity);
        printf(" Enter your price\n");
        scanf(" %d", &quant[i].price);
        ta = quant[i].quantity * quant[i].price;
        pointf (" Total bill amount for %s is %.2f \n",
                pt[i].itemname, ta);
        te += ta;
    }
    printf (" Total expenses in a party is %.2f ", te);
    return 0;
}

```

## OUTPUT:

Enter total number for item  
2

Enter item name  
milk

Enter quantity  
2

Enter price  
50

You took amount for milk is 100

Enter item name  
Butter

Enter quantity  
3

Enter price  
30

You took amount for Butter is 90

Total expenses in a party is 190.

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Create a structure with name student with structure members : name , usn , grade list of Sem1 and grade list of Sem2 . The student will be promoted to 3rd semester if he/she is not having backlog of credit count >=16 .

→

```
#include <stdio.h>
#include <math.h>
```

```
struct Student {
```

```
    char name[50];
    int USN;
    char S1Grade[3];
    char S2Grade[3];
}
```

```
int main() {
```

```
    int i, backlog = 0;
    struct Student s1;
    printf("Enter your name : ");
    scanf("%s", s1.name);
    printf("USN : ");
    scanf("%d", &s1.USN);
    printf("SEM-1 grade in order : \n");
    nos1(n s1.USN, s1.S1Grade);
    nos2(n s1.USN, s1.S2Grade);
    for (i = 0; i < 8; i = i + 1) {
```

```
        scanf("%c" &s1.S1Grade[i]);
```

}

"Sem-2" greenback  
in cedar set.  
Dominant tree  
in poplar  
forest  
near Black  
Holt in  
Power  
County

```

if ( i>= 2 && i< 5 ) {
    if ( s1.s2 grade [i] = "F" ) {
        backlog = backlog + 3,
    }
}

if ( i>= 5 && i< 8 ) {
    if ( s1.s2 grade [i] = 'P' ) {
        backlog = backlog + 1;
    }
}

if ( backlog >= 16 ) {
    printf ("Not Eligible"),
}
else {
    printf ("Eligible");
}
velvino ;
}

OUTPUT :
Enter your name : Ray
USN : 1234
SEM - 1 grade in semester
MCS - 1      A+
CHE          A+
SFH          O
INC          O
WHD         B
CSE          A+
Electronics A+

```

Sem-2 grade in calendar

MCS-2

A

MP5

A

TC E

A<sup>1</sup>

POLY

O

FDP

O

NOTE

A

SDT

A

BUS

A

Eligible.

Q) Given an array arr [ ] containing N distances of the inch-feet system such that each element of the array represents a distance in form of  $\{ \text{inch} \text{ } \text{feet} \}$ . The task is to add all the N inch-foot distances using structures.

→ # includes < stdio.h>  
# include <math.h>.

Struct distance {  
 float arr [50][50];  
};

int main () {  
 int a;

float feet sum = 0, inch sum = 0;  
 int i, j;  
 printf ("Enter the number of inch/feet

hair to be added : " ) ,

scanf (" %d ", & a );

printf (" Enter no pairs : \n ") ;

for ( i = 0 ; i < a ; i++ ) {

for ( j = 0 ; j < 2 ; j++ ) {

scanf (" %f ", & dist . arr [ i ][ j ]) ;

for ( i = 0 ; i < a , i++ ) {

for ( i = 0 ; i < a , i++ ) {

feetsum = feetsum + dist . arr [ i ][ 0 ] ;

inchsum = inchsum + dist . arr [ i ][ 1 ] ;

printf (" Total feet sum = %f \n ", feetsum) ;

printf (" Total inch sum = %f \n ", inchsum) ;

inch - feet

inch - feet

Output

Enter no number of inch feet pairs to be

entered : 3

Enter no pairs :

2.02

3.02

4.04

1.01

Total feet sum = 11.06  
Total inch sum = 8.09

inch - feet

Q1

C program using structure to find whether student need to pay fine or not for the issued book in the college library. If the issued book doses 3 months from the date of issue, the student has to pay fine per day 50/- along with the book cost.

→ #include <stdio.h>

struct student {

int rollnum; char name[20]; struct

{

int D;

int M;

int Y;

} issue\_date, today\_date;

},

int main()

{

int month, days, extramonths, holiday,

bookmonth;

long int fine;

struct student a;

printf ("Enter Student details in");

printf (" Enter Roll Number : ");

scanf ("%d", &amp;a.rollnumber);

printf (" Enter Name ");

scanf ("%s", a.name);

printf (" Enter Issue-date ");

scanf ("%d %d %d", &amp;a.issue\_date, &amp;a.

issue\_date);

printf (" Enter No day date ");

Ans  
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scanf (" %d %d %d ", &a.today.date, &a.today.month, &a.year);  
today.date = a.today.date - a.issue.day; // a.

```
month = a.today.date / 30 + day;
day = a.today.date % 30 - a.issue.day;
printf ("%d %d months", month);
printf ("%d days", day);
if (month) = 3 & day 1 = 0 )
{
    printf (" Enter book amount ");
    scanf ("%d", &booleamt);
    printf (" need to pay fine");
    subamount = month * 30 -
    total day = subamount * 30 + day;
    fine = 50 * total day + booleamt;
    printf (" Fine=%d", fine );
}
```

```
else {
    printf (" Thank you for paying within
    time period ");
}
return;
}

Output : Enter shoolost details
Enter Roll Number : 1
Enter Name : Ananya
181223
Enter issue date : 15-10-2023
Enter today date : 16-1-2024
Cash back days
Or else 1 days
Enter back amount 200
fine = 250
```

~~181223~~

Enter Name : Ananya  
 Enter issue date : 15-10-2023  
 Enter today date : 16-1-2024  
 Cash back days  
 Or else 1 days