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lab -1

1) Create structure itemdetails with members itemname, quantity, price, total amount. calculate party expence.

```
#include<stdio.h>
struct prod{
   char itn[20];
   int qty;
   int price;
};
void main(){
    int n, total=0;
    struct prod m[10];
    printf("Enter total no of product\n");
    scanf("%d", &n);
    for(int i=0;i<n;i++){
        printf("Enter product name, quantity
    and price for %d\n", i+1);
    scanf("%s", m[i].itn);
    scanf("%d", &m[i].qty);
    scanf("%d", &m[i].price);
    }
    for(int i=0; i<n; i++){
        total = total + m[i].price*m[i].qty;
    }
    printf("Total price is %d", total);
    }
```

o/p

Enter the total no of product
3

Enter product name quantity and price for 1
a
2
10
Enter product name quantity and price for 2
b
3
5
Enter product name quantity and price for 3
c
1
20
Total price is 55

2) Program to check backlogs

```
#include<stdio.h>

struct gradelist {
    char coursecode[8][10];
    int credits[8];
    char grade[8];
};

struct std {
    char name[20];
    char usn[10];
    struct gradelist sem1;
    struct gradelist sem2;
} std1;
```

```
int blcredits(struct std s){
    int bl=0;
    for(int i=0; i<8; i++){
        if(s.sem1.grade[i]=='F'){
            bl = bl + s.sem1.credits[i];
        }
    }
    for(int i=0; i<8; i++){
        if(s.sem2.grade[i]=='F'){
            bl = bl + s.sem2.credits[i];
        }
    }
    return(bl);
};

int main(){
    printf("Enter student name:\n");
    scanf("%s", std1.name);
    printf("Enter student usn:\n");
    scanf("%s", std1.usn);
    printf("Enter course code, credits,
        and grade~~to~~ for sem 1 \n");
    for(int i=0; i<8; i++){
        printf("course code:");
        scanf("%s", std1.sem1.coursecode[i]);
        printf("credits:");
        scanf("%d", &std1.sem1.credits[i]);
        printf("Grade:");
        scanf("%c", &std1.sem1.grad[i]);
    }
    printf("Enter course code,credits
        and grade for sem 2\n");
```

```
for(int i=0; i<8; i++){
    printf("course code:");
    scanf("%s", std1.sem2.courseCode[i]);
    printf("credits:");
    scanf("%d", &std1.sem2.credits[i]);
    printf("Grade:");
    scanf("%c", &std1.sem2.grade[i]);
}
int blc = blcredits(std1);
if(blc>=16){
        printf("Fail");
}
else{
        printf("Pass");
}
return 0;
}
```

4) Given array arr[] contains N distinct feet-inch system. write program to sum them

i/p arr = {{1,1.7}, {1,1.5}, {6,8}} o/p fsum=8
#include <stdio.h> isum=11.20

```
struct dist{
    float a[10][10];
}d;

void main(){
    int n;
    float fsum=0.0 isum=0.0;
    printf(Enter the number of feet-inch
                                pairs\n");
```

```
scanf("%d", &n);
printf("Enter the pairs \n");
for(int i=0; i<n; i++){
    for(int j=0; j<2; j++){
        scanf("%d", &d.a[i][j]);
    }
}
for(int i=0; i<a; i++){
    fsum += d.a[i][0];
    isum += d.a[i][1];
}
printf("Feet sum = %d \n Inch sum =
        %d \n", fsum, isum);
}
```

o/p:

```
Enter the number of feet-inch pairs
2
Enter the pair
 2  2
 4  1
Feet sum = 6
Inch sum = 3
```