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1  #include <stdio.h>
2  #include <stdlib.h>
3  typedef struct{
4      int day;
5      int month;
6      int year;
7  }date;
8  struct item{
9      char name[20];
10     int id;
11     date d;
12     float amount;
13     float discount;
14 };
15 void display(struct item* it,int i,float sum,float total){
16     FILE *records=fopen("Record.txt","r");
17     fread(it,sizeof(struct item),i,records);
18     int counter;
19     for(counter=0;counter<i;counter++){
20         printf("\nItem %d", (counter+1));
21         printf("\nItem Name: %s", (it+counter)->name);
22         printf("\nItem ID: %d", (it+counter)->id);
23         printf("\nDate: %d/%d/%d", (it+counter)->d.day, (it+counter)->d.month, (it+
counter)->d.year);
24         printf("\nAmount: %f", (it+counter)->amount);
25         printf("\nDiscount: %f", (it+counter)->discount);
26     }
27     printf("\nTotal sales: %.4f", sum);
28     printf("\nTotal sales(after discount): %.4f", total);
29     fclose(records);
30 }
31 float discount(struct item* it,int i,float sum){
32     int counter;
33     for(counter=0;counter<i;counter++){
34         (it+counter)->discount=0.1*(it+counter)->amount;
35         sum=sum-((it+counter)->discount);
36     }
37     return sum;
38 }
39 int main()
40 {
41     int i=0,ch=0;
42     float sum=0.0;
43     int size=1;
44     float total;
45     struct item *it=(struct item*)malloc(sizeof(struct item)*size);
46     do{
47         printf("\nEnter the item name");
48         scanf("%s", (it+i)->name);
49         printf("Enter item id");
50         scanf("%d", &(it+i)->id);
51         printf("Enter the date in dd mm yy format");
52         scanf("%d %d %d", &(it+i)->d.day, &(it+i)->d.month, &(it+i)->d.year);
53         printf("Enter the amount");
54         scanf("%f", &(it+i)->amount);
55         //(it+i)->discount=0.1*((it+i)->amount);
56         sum=sum+(it+i)->amount;
57         i++;
58         size++;
59         printf("\nEnter 1 to exit. Enter anything else to continue");
60         it=(struct item*)realloc(it, sizeof(struct item)*size);
61         //printf("\nType 1 to add another item");
62         scanf("%d", &ch);
63         if(ch==1)
64             break;
65     }while(1);

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66     FILE *records=fopen("Record.txt","w");
67     total=discount(it,i,sum);
68     fwrite(it,sizeof(struct item),i,records);
69     printf("Type y to view the records");
70     char choice;
71     fflush(stdin);
72     scanf("%c",&choice);
73     fclose(records);
74     if(choice=='y')
75         display(it,i,sum,total);
76     return 0;
77 }
```