

```
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
#include<string.h>
```

```
void input();
void writefile();
void search();
void output();
```

```
struct date{
int month;
int day;
int year;
};
```

```
struct account {
int number;
char name[100];
int acct_no;
float mobile_no;
char street[100];
char city[100];
char acct_type;
float oldbalance;
```

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```
float newbalance;
float payment;
struct date lastpayment;
```

```

}customer;

int tl,sl,ts;

int main()
{
int i,n;
char ch;

printf("&quot; CUSTOMER BILLING SYSTEM:\n\n&quot;");
printf("&quot;=====\\n&quot;");
printf("&quot;\n1: to add account on list\n&quot;");
printf("&quot;2: to search customer account\n&quot;");
printf("&quot;3: exit\n&quot;");
printf("&quot;\n=====\\n&quot;");
do{
printf("&quot;\nselect what do you want to do?&quot;");
ch=getche();
}while(ch<='0' || ch>'3');
switch(ch){
case '1':

printf("&quot;\nhow many customer accounts?&quot;");
scanf("&quot;%d&quot;",&n);
for(i=0;i<n;i++){

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input();

if(customer.payment>0)

customer.acct_type=(customer.payment<0.1*customer.oldbalance)? 'O':
'D';

```

```

else
customer.acct_type=(customer.oldbalance>0)?'D' : 'C';
customer.newbalance=customer.oldbalance - customer.payment;
writefile();
}
main();
case 2:

```

```

printf("search by what?\n");
printf("\n1 --- search by customer number\n");
printf("\n2 --- search by customer name\n");
search();
ch=getche();
main();

```

```

}
}

```

```

void input()
{
FILE *fp=fopen("bidur.dat","rb");
fseek (fp,0,SEEK_END);

```

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```

tl=ftell(fp);
sl=sizeof(customer);
ts=tl/sl;
fseek(fp,(ts-1)*sl,SEEK_SET);
fread(&customer,sizeof(customer),1,fp);
printf("\ncustomer no:%d\n",++customer.number);

```

```

fclose(fp);

printf("&quot; Account number:&quot;);

scanf("&quot;%d&quot;;&amp;customer.acct_no);

printf("&quot;\n Name:&quot;);

scanf("&quot;%s&quot;;customer.name);

printf("&quot;\n mobile no:&quot;);

scanf("&quot;%f&quot;;&amp;customer.mobile_no);

printf("&quot; Street:&quot;);

scanf("&quot;%s&quot;;customer.street);

printf("&quot; City:&quot;);

scanf("&quot;%s&quot;;customer.city);

printf("&quot; Previous balance:&quot;);

scanf("&quot;%f&quot;;&amp;customer.oldbalance);

printf("&quot; Current payment:&quot;);

scanf("&quot;%f&quot;;&amp;customer.payment);

printf("&quot; Payment date(mm/dd/yyyy):&quot;);


scanf("&quot;%d/%d/%d&quot;;&amp;customer.lastpayment.month,&amp;customer.lastpayment.d
ay,&amp;customer.lastpaymen
t.year);

return;

```

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}

```

void writefile()

{

FILE *fp;

fp=fopen("&quot;bidur.dat&quot;;&quot;ab&quot;);

fwrite(&amp;customer,sizeof(customer),1,fp);

```

```
fclose(fp);  
return;  
}
```

```
void search()  
{  
char ch;  
char nam[100];  
int n,i,m=1;  
FILE *fp;  
fp=fopen(&quot;bidur.dat&quot;,&quot;rb&quot;);  
do{  
printf(&quot;\nenter your choice:&quot;);  
ch=getche();  
}while(ch!=&#39;1&#39; &amp;&amp; ch!=&#39;2&#39;);  
switch(ch){  
case &#39;1&#39;:  
fseek(fp,0,SEEK_END);
```

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```
tl=ftell(fp);  
sl=sizeof(customer);  
ts=tl/sl;  
do{  
printf(&quot;\nchoose customer number:&quot;);  
scanf(&quot;%d&quot;,&amp;n);  
if(n<=0 || n>ts)  
printf(&quot;\nenter correct\n&quot;);  
else{  
fseek(fp,(n-1)*sl,SEEK_SET);
```

```

fread(&customer,sl,1,fp);
output();
}
printf("\n\nagain?(y/n)");
ch=getche();
}while(ch!='y');
fclose(fp);
break;
case 2:;
fseek(fp,0,SEEK_END);
tl=ftell(fp);
sl=sizeof(customer);
ts=tl/sl;
fseek(fp,(ts-1)*sl,SEEK_SET);
fread(&customer,sizeof(customer),1,fp);

```

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```

n=customer.number;

do{
printf("\nenter the name:");
scanf("%s",nam);
fseek(fp,0,SEEK_SET);
for(i=1;i<=n;i++)
{
fread(&customer,sizeof(customer),1,fp);
if(strcmp(customer.name,nam)==0)
{
output();
m=0;

```

```

break;
}
}
if(m!=0)
printf(&quot;\n\ndoesn't exist\n&quot;);
printf(&quot;\nanother?(y/n)&quot;);
ch=getche();
}while(ch=='y');
fclose(fp);
}
return;
}

```

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```

void output()
{
printf(&quot;\n\n Customer no :%d\n&quot;;customer.number);
printf(&quot; Name :%s\n&quot;;customer.name);
printf(&quot; Mobile no :%.f\n&quot;;customer.mobile_no);
printf(&quot; Account number :%d\n&quot;;customer.acct_no);
printf(&quot; Street :%s\n&quot;;customer.street);
printf(&quot; City :%s\n&quot;;customer.city);
printf(&quot; Old balance :%.2f\n&quot;;customer.oldbalance);
printf(&quot; Current payment:%.2f\n&quot;;customer.payment);
printf(&quot; New balance :%.2f\n&quot;;customer.newbalance);
printf(&quot; Payment date
:%d/%d/%d\n\n&quot;;customer.lastpayment.month,customer.lastpayment.day,customer.lastpaym
ent.year);
printf(&quot; Account status :&quot;);
switch(customer.acct_type)

```

```
{  
case '#39;C'#39;:  
printf("&quot;CURRENT\\n\\n&quot;);  
break;  
case '#39;O'#39;:  
printf("&quot;OVERDUE\\n\\n&quot;);  
break;  
case '#39;D'#39;:
```

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```
printf("&quot;DELINQUENT\\n\\n&quot;);  
break;  
default:  
printf("&quot;ERROR\\n\\n&quot;);  
}  
  
return;  
}
```