```c
#include<stdio.h>
#include<stdlib.h>
#include<windows.h>
int i,j;
int main_exit;
void menu();
struct date{
    int month,day,year;

    };
struct {

    char name[60];
    int acc_no,age;
    char address[60];
    char citizenship[15];
    double phone;
    char acc_type[10];
    float amt;
    struct date dob;
    struct date deposit;
    struct date withdraw;

    }add,upd,check,rem,transaction;

float interest(float t,float amount,int rate)
{
    float SI;
    SI=(rate*t*amount)/100.0;
    return (SI);

}
void fordelay(int j)
{   int i,k;
    for(i=0;i<j;i++)
        k=i;
```

```c
39  void new_acc()
40
41  {
42      int choice;
43      FILE *ptr;
44
45      ptr=fopen("record.dat","a+");
46      account_no:
47      system("cls");
48      printf("\t\t\t\xB2\xB2\xB2\ ADD RECORD  \xB2\xB2\xB2\xB2");
49      printf("\n\n\nEnter today's date(mm/dd/yyyy):");
50      scanf("%d/%d/%d",&add.deposit.month,&add.deposit.day,&add.deposit.year);
51      printf("\nEnter the account number:");
52      scanf("%d",&check.acc_no);
53      while(fscanf(ptr,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",&add.acc_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.ph
54      {
55          if (check.acc_no==add.acc_no)
56              {printf("Account no. already in use!");
57              fordelay(1000000000);
58                  goto account_no;
59
60              }
61      }
62      add.acc_no=check.acc_no;
63          printf("\nEnter the name:");
64      scanf("%s",add.name);
65      printf("\nEnter the date of birth(mm/dd/yyyy):");
66      scanf("%d/%d/%d",&add.dob.month,&add.dob.day,&add.dob.year);
67      printf("\nEnter the age:");
68      scanf("%d",&add.age);
69      printf("\nEnter the address:");
70      scanf("%s",add.address);
71      printf("\nEnter the citizenship number:");
72      scanf("%s",add.citizenship);
73      printf("\nEnter the phone number: ");
74      scanf("%lf",&add.phone);
75      printf("\nEnter the amount to deposit:$");
```

```c
76      scanf("%f",&add.amt);
77      printf("\nType of account:\n\t#Saving\n\t#Current\n\t#Fixed1(for 1 year)\n\t#Fixed2(for 2 years)\n\t#Fixed3(for 3 years)\n\n\tEnter your choice:");
78      scanf("%s",add.acc_type);
79
80          fprintf(ptr,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.phone,add
81
82
83      fclose(ptr);
84      printf("\nAccount created successfully!");
85      add_invalid:
86      printf("\n\n\n\t\tEnter 1 to go to the main menu and 0 to exit:");
87      scanf("%d",&main_exit);
88      system("cls");
89      if (main_exit==1)
90          menu();
91      else if(main_exit==0)
92              close();
93      else
94          {
95              printf("\nInvalid!\a");
96              goto add_invalid;
97          }
98  }
99  void view_list()
100 {
101     FILE *view;
102     view=fopen("record.dat","r");
103     int test=0;
104     system("cls");
105     printf("\nACC. NO.\tNAME\t\t\tADDRESS\t\t\tPHONE\n");
106
107     while(fscanf(view,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.pho
108         {
109             printf("\n%6d\t %10s\t\t\t%10s\t\t%.01f",add.acc_no,add.name,add.address,add.phone);
110             test++;
111         }
112
```

```c
113        fclose(view);
114      if (test==0)
115        {    system("cls");
116            printf("\nNO RECORDS!!\n");}
117
118      view_list_invalid:
119       printf("\n\nEnter 1 to go to the main menu and 0 to exit:");
120          scanf("%d",&main_exit);
121          system("cls");
122          if (main_exit==1)
123              menu();
124          else if(main_exit==0)
125              close();
126          else
127          {
128              printf("\nInvalid!\a");
129              goto view_list_invalid;
130          }
131  }
132  void edit(void)
133  {
134      int choice,test=0;
135      FILE *old,*newrec;
136      old=fopen("record.dat","r");
137      newrec=fopen("new.dat","w");
138
139      printf("\nEnter the account no. of the customer whose info you want to change:");
140      scanf("%d",&upd.acc_no);
141      while(fscanf(old,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.phon
142      {
143          if (add.acc_no==upd.acc_no)
144          {   test=1;
145              printf("\nWhich information do you want to change?\n1.Address\n2.Phone\n\nEnter your choice(1 for address and 2 for phone):");
146              scanf("%d",&choice);
147              system("cls");
148              if(choice==1)
149                  {printf("Enter the new address:");
```

```
149              {printf("Enter the new address:");
150              scanf("%s",upd.address);
151              fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,upd.address,add.citizenship,ad
152              system("cls");
153              printf("Changes saved!");
154              }
155          else if(choice==2)
156              {
157                  printf("Enter the new phone number:");
158              scanf("%lf",&upd.phone);
159              fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,up
160              system("cls");
161              printf("Changes saved!");
162              }
163
164          }
165          else
166              fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.ph
167      }
168      fclose(old);
169      fclose(newrec);
170      remove("record.dat");
171      rename("new.dat","record.dat");
172
173  if(test!=1)
174          {   system("cls");
175              printf("\nRecord not found!!\a\a\a");
176              edit_invalid:
177                printf("\nEnter 0 to try again,1 to return to main menu and 2 to exit:");
178                scanf("%d",&main_exit);
179                system("cls");
180                  if (main_exit==1)
181
182                      menu();
183                  else if (main_exit==2)
184                      close();
185                  else if(main_exit==0)
```

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```c
186                        edit();
187                else
188                    {printf("\nInvalid!\a");
189                    goto edit_invalid;}
190        }
191    else
192        {printf("\n\n\nEnter 1 to go to the main menu and 0 to exit:");
193        scanf("%d",&main_exit);
194        system("cls");
195        if (main_exit==1)
196            menu();
197        else
198            close();
199        }
200 }
201
202 void transact(void)
203 {   int choice,test=0;
204     FILE *old,*newrec;
205     old=fopen("record.dat","r");
206     newrec=fopen("new.dat","w");
207
208        printf("Enter the account no. of the customer:");
209        scanf("%d",&transaction.acc_no);
210        while (fscanf(old,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.pho
211        {
212
213            if(add.acc_no==transaction.acc_no)
214            {   test=1;
215                if(strcmpi(add.acc_type,"fixed1")==0||strcmpi(add.acc_type,"fixed2")==0||strcmpi(add.acc_type,"fixed3")==0)
216                {
217                    printf("\a\a\a\n\nYOU CANNOT DEPOSIT OR WITHDRAW CASH IN FIXED ACCOUNTS!!!!!");
218                    fordelay(1000000000);
219                    system("cls");
220                    menu();
221
222                }
223                printf("\n\nDo you want to\n1.Deposit\n2.Withdraw?\n\nEnter your choice(1 for deposit and 2 for withdraw):");
```

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```c
            printf("\n\nDo you want to\n1.Deposit\n2.Withdraw?\n\nEnter your choice(1 for deposit and 2 for withdraw):");
            scanf("%d",&choice);
            if (choice==1)
            {
                printf("Enter the amount you want to deposit:$ ");
                scanf("%f",&transaction.amt);
                add.amt+=transaction.amt;
                fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizensh
                printf("\n\nDeposited successfully!");
            }
            else
            {
                printf("Enter the amount you want to withdraw:$ ");
                scanf("%f",&transaction.amt);
                add.amt-=transaction.amt;
                fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizensh
                printf("\n\nWithdrawn successfully!");
            }

        }
        else
        {
            fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,ad
        }
    }
    fclose(old);
    fclose(newrec);
    remove("record.dat");
    rename("new.dat","record.dat");
    if(test!=1)
    {
        printf("\n\nRecord not found!!");
        transact_invalid:
        printf("\n\n\nEnter 0 to try again,1 to return to main menu and 2 to exit:");
        scanf("%d",&main_exit);
        system("cls");
        if (main_exit==0)
```

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```c
259        if (main_exit==0)
260            transact();
261      else if (main_exit==1)
262            menu();
263      else if (main_exit==2)
264            close();
265      else
266      {
267            printf("\nInvalid!");
268            goto transact_invalid;
269      }
270
271    }
272    else
273    {
274        printf("\nEnter 1 to go to the main menu and 0 to exit:");
275        scanf("%d",&main_exit);
276        system("cls");
277        if (main_exit==1)
278            menu();
279        else
280            close();
281    }
282
283 }
284 void erase(void)
285 {
286     FILE *old,*newrec;
287     int test=0;
288     old=fopen("record.dat","r");
289     newrec=fopen("new.dat","w");
290     printf("Enter the account no. of the customer you want to delete:");
291     scanf("%d",&rem.acc_no);
292     while (fscanf(old,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add.pho
293     {
294         if(add.acc_no!=rem.acc_no)
295             fprintf(newrec,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d\n",add.acc_no,add.name,add.dob.month,add.dob.day,add.dob.year,add.age,add.address,add.citizenship,add.ph
```

```
297         else
298             {test++;
299             printf("\nRecord deleted successfully!\n");
300             }
301     }
302     fclose(old);
303     fclose(newrec);
304     remove("record.dat");
305     rename("new.dat","record.dat");
306     if(test==0)
307         {
308             printf("\nRecord not found!!\a\a\a");
309             erase_invalid:
310             printf("\nEnter 0 to try again,1 to return to main menu and 2 to exit:");
311             scanf("%d",&main_exit);
312
313               if (main_exit==1)
314                   menu();
315             else if (main_exit==2)
316                   close();
317             else if(main_exit==0)
318                   erase();
319             else
320                 {printf("\nInvalid!\a");
321                 goto erase_invalid;}
322         }
323     else
324         {printf("\nEnter 1 to go to the main menu and 0 to exit:");
325         scanf("%d",&main_exit);
326         system("cls");
327         if (main_exit==1)
328             menu();
329         else
330             close();
331         }
332
333 }
```

```
335  void see(void)
336  {
337      FILE *ptr;
338      int test=0,rate;
339      int choice;
340      float time;
341      float intrst;
342      ptr=fopen("record.dat","r");
343      printf("Do you want to check by\n1.Account no\n2.Name\nEnter your choice:");
344      scanf("%d",&choice);
345      if (choice==1)
346      {   printf("Enter the account number:");
347          scanf("%d",&check.acc_no);
348
349          while (fscanf(ptr,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc_no,add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&add
350          {
351              if(add.acc_no==check.acc_no)
352              {   system("cls");
353                  test=1;
354
355                  printf("\nAccount NO.:%d\nName:%s \nDOB:%d/%d/%d \nAge:%d \nAddress:%s \nCitizenship No:%s \nPhone number:%.01f \nType Of Account:%s \nAmount deposited:$ %.2f
356                  add.acc_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);
357                  if(strcmpi(add.acc_type,"fixed1")==0)
358                      {
359                          time=1.0;
360                          rate=9;
361                          intrst=interest(time,add.amt,rate);
362                          printf("\n\nYou will get $%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+1);
363                      }
364                  else if(strcmpi(add.acc_type,"fixed2")==0)
365                      {
366                          time=2.0;
367                          rate=11;
368                          intrst=interest(time,add.amt,rate);
369                          printf("\n\nYou will get $.%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+2);
370
371                      }
372                  else if(strcmpi(add.acc_type,"fixed3")==0)
```

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```c
            else if(strcmpi(add.acc_type,"fixed3")==0)
                {
                    time=3.0;
                    rate=13;
                    intrst=interest(time,add.amt,rate);
                    printf("\n\nYou will get $.%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+3);

                }
            else if(strcmpi(add.acc_type,"saving")==0)
                {
                    time=(1.0/12.0);
                    rate=8;
                    intrst=interest(time,add.amt,rate);
                    printf("\n\nYou will get $.%.2f as interest on %d of every month",intrst,add.deposit.day);

                }
            else if(strcmpi(add.acc_type,"current")==0)
                {

                    printf("\n\nYou will get no interest\a\a");

                }

        }
    }
}
else if (choice==2)
{   printf("Enter the name:");
    scanf("%s",&check.name);
    while (fscanf(ptr,"%d %s %d/%d/%d %d %s %s %lf %s %f %d/%d/%d",&add.acc_no,&add.name,&add.dob.month,&add.dob.day,&add.dob.year,&add.age,add.address,add.citizenship,&ad
    {
        if(strcmpi(add.name,check.name)==0)
        {   system("cls");
            test=1;
            printf("\nAccount No.:%d\nName:%s \nDOB:%d/%d/%d \nAge:%d \nAddress:%s \nCitizenship No:%s \nPhone number:%.0lf \nType Of Account:%s \nAmount deposited:$%.2f
            add.acc_type,add.amt,add.deposit.month,add.deposit.day,add.deposit.year);
            if(strcmpi(add.acc_type,"fixed1")==0)
```

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```c
409                 {
410                     time=1.0;
411                     rate=9;
412                     intrst=interest(time,add.amt,rate);
413                     printf("\n\nYou will get $.%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+1);
414                 }
415             else if(strcmpi(add.acc_type,"fixed2")==0)
416                 {
417                     time=2.0;
418                     rate=11;
419                     intrst=interest(time,add.amt,rate);
420                     printf("\n\nYou will get $.%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+2);
421
422                 }
423             else if(strcmpi(add.acc_type,"fixed3")==0)
424                 {
425                     time=3.0;
426                     rate=13;
427                     intrst=interest(time,add.amt,rate);
428                     printf("\n\nYou will get $.%.2f as interest on %d/%d/%d",intrst,add.deposit.month,add.deposit.day,add.deposit.year+3);
429
430                 }
431             else if(strcmpi(add.acc_type,"saving")==0)
432                 {
433                     time=(1.0/12.0);
434                     rate=8;
435                     intrst=interest(time,add.amt,rate);
436                     printf("\n\nYou will get $.%.2f as interest on %d of every month",intrst,add.deposit.day);
437
438                 }
439             else if(strcmpi(add.acc_type,"current")==0)
440                 {
441
442                     printf("\n\nYou will get no interest\a\a");
443
444                 }
445
446         }
```

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```
}
446        }
447    }
448
449
450
451    fclose(ptr);
452     if(test!=1)
453        {    system("cls");
454            printf("\nRecord not found!!\a\a\a");
455            see_invalid:
456              printf("\nEnter 0 to try again,1 to return to main menu and 2 to exit:");
457              scanf("%d",&main_exit);
458              system("cls");
459                if (main_exit==1)
460                    menu();
461              else if (main_exit==2)
462                  close();
463              else if(main_exit==0)
464                  see();
465              else
466                  {
467                      system("cls");
468                      printf("\nInvalid!\a");
469                      goto see_invalid;}
470        }
471    else
472        {printf("\nEnter 1 to go to the main menu and 0 to exit:");
473        scanf("%d",&main_exit);}
474        if (main_exit==1)
475        {
476            system("cls");
477            menu();
478        }
479
480        else
481          {
482
```

```c
483            system("cls");
484            close();
485            }
486
487  }
488
489
490  void close(void)
491  {
492      printf("\n\n\n\nThis C Mini Project is developed by Code With C team!");
493      }
494
495
496  void menu(void)
497  {    int choice;
498      system("cls");
499      system("color 9");
500      printf("\n\n\t\t\tCUSTOMER ACCOUNT BANKING MANAGEMENT SYSTEM");
501      printf("\n\n\n\t\t\t\xB2\xB2\xB2\xB2\xB2\xB2\xB2 WELCOME TO THE MAIN MENU \xB2\xB2\xB2\xB2\xB2\xB2\xB2");
502      printf("\n\n\t\t1.Create new account\n\t\t2.Update information of existing account\n\t\t3.For transactions\n\t\t4.Check the details of existing account\n\t\t5.Removing ex:
503      scanf("%d",&choice);
504
505      system("cls");
506      switch(choice)
507      {
508          case 1:new_acc();
509          break;
510          case 2:edit();
511          break;
512          case 3:transact();
513          break;
514          case 4:see();
515          break;
516          case 5:erase();
517          break;
518          case 6:view_list();
519          break;
```

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```
519        break;
520        case 7:close();
521        break;
522
523    }
524
525
526
527  }
528  int main()
529  {
530      char pass[10],password[10]="codewithc";
531      int i=0;
532      printf("\n\n\t\tEnter the password to login:");
533      scanf("%s",pass);
534      /*do
535      {
536      //if (pass[i]!=13&&pass[i]!=8)
537          {
538              printf("*");
539              pass[i]=getch();
540              i++;
541          }
542      }while (pass[i]!=13);
543      pass[10]='\0';*/
544      if (strcmp(pass,password)==0)
545          {printf("\n\nPassword Match!\nLOADING");
546          for(i=0;i<=6;i++)
547          {
548              fordelay(100000000);
549              printf(".");
550          }
551              system("cls");
552          menu();
553          }
554      else
555          {  printf("\n\nWrong password!!\a\a\a");
556             login.try;
```

<div align="center">15</div>

```
550            }
551                    system("cls");
552            menu();
553            }
554        else
555        {   printf("\n\nWrong password!!\a\a\a");
556            login_try:
557            printf("\nEnter 1 to try again and 0 to exit:");
558            scanf("%d",&main_exit);
559            if (main_exit==1)
560                    {
561
562                        system("cls");
563                        main();
564                    }
565
566            else if (main_exit==0)
567                    {
568                    system("cls");
569                    close();}
570            else
571                    {printf("\nInvalid!");
572                    fordelay(1000000000);
573                    system("cls");
574                    goto login_try;}
575
576        }
577        return 0;
578 }
```