```
class login interface
      char *line;//Using Dynamic Memory Management to calculate size of the line of the
file for storing line it in array
      char id[20];
      char pass[20];
      char ch;
      char name[20];
      char age[10];
      int i,k,c,flag;
public:
void employee(char ID[], char PASS[])
       item obj;
       i=0;
       k=0;
       c=0;
      ifstream ifs("employeecredentials.csv");
      line=new char[sizeof(ifs)];
      ifs>>line;
     while(!ifs.eof())
      i=0;
      for(;line[i]!=',';i++)
        id[k++]=line[i];
      id[k]='\0';
      i++;
      k=0;
      for(;line[i]!='*';i++)
        pass[k++]=line[i];
      pass[k]='\0';
      i++;
      k=0;
      if (strcmp(ID,id) ==0&&strcmp(pass,PASS) ==0)
          flag=1;
          break;
      delete []line;
      line=new char[sizeof(ifs)];
      ifs>>line;
       ifs.close();
      if(flag==1)
            while(1)
            system("cls");
            cout<<
                                          "<<endl;
            cout<<
                                                                           LOGIN
SUCCESSFUL
                                                                           "<<endl;
            cout<<
                                          "<<endl;
            cout<<
                                                                                "<<endl;
WELCOME, EMPLOYEE
            cout<<"\n\n
                                                                               1.TO START
BILLING
                                                                  "<<endl;
            cout<<"
                                                                          2.TO DISPLAY THE
                                                                "<<endl;
ITEMS
            cout<<"
3.EXIT
                                                                                  "<<endl;
            cout<<"\n\nINPUT: ";</pre>
            cin>>ch;
            system("cls");
```

```
switch (ch)
        case '1':
            {
             system("cls");
             bill ob1;
              ob1.billdetails();
              cout<<"\nPress Any Key to Return...";</pre>
              getch();
             break;
            }
        case '2':
            {
            obj.displayitem();
             gotoxy(5,15);
             cout<<<"\n\n\n Enter any key to return .... ";</pre>
             getch();
             break;
             }
        case '3':
            exit(0);
            break;
        default: cout<<" Wrong Input !!!!!";</pre>
              }
      }
      else
             system("cls");
             cout<<
                                           "<<endl;
             cout<<"
                                                                                LOGIN
FAILED
                                                                           "<<endl;
             cout<<
                                           "<<endl;
             cout<<"\n\n
                                                                                ENTER ID:";
            cout<<"\n\n
                                                                                PASSWORD:";
             gotoxy(60,5);
             cin>>ID;
            gotoxy(60,7);
             cin>>PASS;
            employee(ID, PASS);
void credentials()
    ofstream ofs1("employees.csv",ios::out|ios::app);
    ofstream ofs2("employeecredentials.csv",ios::out|ios::app);
    do{
    cout<<"\t\t\t\t\t\tEnter Name: ";</pre>
    cin>>name;
    cout<<"\n\t\t\t\t\tEnter Age: ";</pre>
    cin>>age;
    cout<<"\n\t\t\t\t\t\tLogin ID: ";</pre>
    cin>>id;
    cout<<"\n\t\t\t\t\t\tPassword: ";</pre>
    cin>>pass;
    ofs1<<name<<","<<age<<","<<id<<","<<pass<<"*"<<endl;
    ofs2<<id<<","<<pas><<"*"<<endl;
    cout<<"\n's' TO SAVE"<<endl;</pre>
    ch=getch();
    }while(ch!='s');
    cout<<"\n Press any key to return ..... ";</pre>
    getch();
void admin(char ID[],char PASS[])
    {
    item ob;
```

```
bill obj2;
      i=0;
      k=0;
      c = 0;
      ifstream ifs("admin.csv");
      line=new char[sizeof(ifs)];
      ifs>>line;
      while(!ifs.eof())
      for(;line[i]!=',';i++)
        id[k++]=line[i];
      id[k]='\setminus 0';
      i++;
      k=0;
      for(;line[i]!='*';i++)
        pass[k++]=line[i];
      pass[k]='\0';
      i++;
      k=0;
      if (strcmp(ID,id) == 0 & & strcmp(PASS, pass) == 0)
             while(1)
             system("cls");
             cout<<
                                           "<<endl;
             cout<<"
                                                                             LOGIN
SUCCESSFUL
                                                                            "<<endl;
             cout<<
                                           "<<endl;
             cout<<
                                                                              WELCOME,
                                                                        "<<endl;
ADMIN
             cout<<"\n\n
                                                                                1.TO ADD NEW
                                                                  "<<endl;
ITEM
                                                                            2.TO DISPLAY THE
             cout<<"
ITEMS
                                                                  "<<endl;
            cout<<"
                                                                            3.TO ADD/EDIT
                                                                     "<<\!\mathtt{end1};
FESTIVAL DATES
            cout<<"
                                                                            4.TO VIEW OLD
                                                                     "<<endl;
BILLS
             cout<<"
                                                                            5.TO DELETE AN
ITEM
                                                                    "<<endl;
             cout<<"
                                                                            6.TO REGISTER AN
EMPLOYEE
                                                                  "<<endl;
             cout<<"
7.EXIT
                                                                                    "<<endl;
             cout<<"\n\nINPUT: ";</pre>
             cin>>ch;
             system("cls");
             switch(ch)
             {
        case '1':
           {
             cout<<
                                           "<<endl;
             cout<<"
                                                                               ADDING
                                                                         "<<endl;
ITEM
             cout<<
                                           "<<endl;
             ob.edit(); //Overloaded Function edit() i.e. Dynamic Polymorphism as an OOP
feature
            break;
           }
        case '2':
           {
```

cart ob1;

```
char f;
            ob.displayitem();
            gotoxy(5,18);
            cout<<"\n 1.TO VIEW/EDIT AN ITEM
                                                    "<<endl;
            cout << " ANY KEY TO RETURN....
                                                     "<<endl;
            f=getch();
            if(f!='1')
               break;
            else
             item itemedit;
             cout << " \n \n
                                                                       1.TO VIEW DETAILS OF
AN ITEM"<<endl;
             cout<<"
                                                                   2.TO EDIT DETAILS OF AN
ITEM"<<endl;</pre>
             editing:
             \verb"cout"<<"\n"
                                                                   INPUT:";
             cin>>f;
             if(f=='1'||f=='2')
                itemedit.edit(f);
              else
              {
              cout<<"\n Wrong input...press any key to continue";</pre>
              getch();
              goto editing;
            cout<<"\nANY KEY TO RETURN....";</pre>
            getch();
            continue;
        case '3':
            ob1.edit_date();
            cout<<"\nANY KEY TO RETURN....";
            getch();
              break;
        case '4':
            {
            char date[20];
            cout<<
                                          "<<endl;
            cout<<"
DETAILS
                                                                             "<<endl;
            cout<<
                                          "<<endl;
            cout<<"\t Enter Date: ";</pre>
            cin>>date;
            obj2.see archived details(date);
                                                         ";
            cout<<"\n\n\nANY KEY TO RETURN....</pre>
            getch();
            break;
            }
        case '5':
            ob.displayitem();
            gotoxy(40,19);
            cout<<
"\n_
                                            "<<endl;
            cout<<"
                                                                            DELETING
                                                                       "<<endl;
ITEM
                                           "<<endl;
            cout<<"Enter Product id: ";</pre>
```

```
cin>>id;
            ob.remove_item(id);
            break;
        case '6':
           {
            cout<<
                                         "<<endl;
            cout<<"
                                                                  EMPLOYEE
                                                                              "<<endl;
REGISTRATION
            cout<<
                                         "<<endl;
            credentials();
            break;
        case '7':
            exit(0);
            break;
        default:
            cout<<" Wrong Input !!!!!";</pre>
        }
    else
            {system("cls");
            cout<<
                                        "<<endl;
            cout<<"
                                                                           LOGIN
                                                                       "<<endl;
FAILED
            cout<<
                                         "<<endl;
            cout<<"\n\n
                                                                            ENTER ID:";
            cout<<"\n\n
                                                                            PASSWORD:";
            gotoxy(60,5);
            cin>>id;
            gotoxy(60,7);
            cin>>pass;
            admin(id,pass);
       delete []line;
       line=new char[sizeof(ifs)];
       ifs>>line;
      } }
} ;
```