```cpp
#include<iostream.h>
#include<conio.h>
#include<stdio.h>
class publication
{
  private:
   char title[80];
   float price;
  public:
   void getdata();
   void putdata();
};
class book:public publication
{
  private:
   int pagecount;
  public:
   book()
   {
      cout<<"\n\nBook:";
   }
   void getdata();
   void putdata();
};
class tape:public publication
{
  private:
   float playingtime;
  public:
    tape()
    {
      cout<<"\n\nTape:";
    }

   void getdata();
   void putdata();
};
void publication::getdata()
{
  cout<<"\nEnter the title:";
  gets(title);
  cout<<"\nEnter the price:";
  cin>>price;
}
void publication::putdata()
{
  cout<<"\nTitle of a string:"<<title;
  cout<<"\nPrice:"<<price;
}
void book::getdata()
{
  publication::getdata();
  cout<<"\nEnter the number of pages:";
  cin>>pagecount;
}
void book::putdata()
{
  publication::putdata();
  cout<<"\nNumber of pages:"<<pagecount;
}
void tape::getdata()
{
  publication::getdata();
  cout<<"\nEnter the playing time in minutes:";
  cin>>playingtime;
}
```

```cpp
void tape::putdata()
{
   publication::putdata();
   cout<<"\nPlaying time:"<<playingtime<<"minutes:";
}
void main()
{
   clrscr();
   book b1;
   b1.getdata();
   b1.putdata();
   tape t1;
   t1.getdata();
   t1.putdata();
   getch();
}
```

```
Book:
Enter the title:Chemistry
Enter the price:400
Enter numbner of pages:271

Title:Chemistry
Price:400
Number of pages:271

Tape:
Enter the title:Stranger things
Enter the price:500
Enter the playing time in minutes:45

Title:Stranger things
Price:500
Playing time:45 minutes_
```

```cpp
#include<iostream.h>
#include<conio.h>
#include<fstream.h>
#include<stdio.h>
#include<string.h>
#include<process.h>
char filename[30];
int pass=1;
class flight
{
  private:
   char flightno[30];
   char flight_tict_no[30];
   char name[30];
   char source[50];
   char destination[50];
   float distance;
   float tict_cost;
  public:
   void getdata();
   void putdata();
}f1;
void flight::getdata()
{
  cout<<"\nEnter flight number:";
  gets(flightno);
  cout<<"\nEnter the flight ticket number:";
  gets(flight_tict_no);
  cout<<"\nEnter passengers name:";
  gets(name);
  cout<<"\nEnter the source of flight:";
  gets(source);
  cout<<"\nEnter the destination of flight:";
  gets(destination);
  cout<<"\nEnter the distance of journey(km):";
  cin>>distance;
  tict_cost=distance*15;
}
void flight::putdata()
{
  cout<<"\nDetails of the passenger="<<pass;
  cout<<"\nFlight number="<<strupr(flightno);
  cout<<"\nFlight ticket number="
      <<strupr(flight_tict_no);
  cout<<"\nPassengers name:"<<strupr(name);
  cout<<"\nSource of flight:"<<strupr(source);
  cout<<"\nDestination of flight:"
      <<strupr(destination);
  cout<<"\nDistance of journey(KM):"<<distance;
  cout<<"\nTicket cost:"<<tict_cost;
  cout<<"\n";
  if(pass%2==0)
  {
    getch();
    clrscr();
  }
  pass++;
}
void writedata()
{
  ofstream fout;
  cout<<"\nEnter the name to write:";
  gets(filename);
fout.open(filename,ios::out|ios::binary|ios::noreplace); }

if(fout==NULL)
{
  cout<<"\nFile already exist...";
}
else
{
  char ans='Y';
  while(ans=='Y'||ans=='y')
  {
    f1.getdata();
    fout.write((char *)&f1,sizeof(f1));
    cout<<"\nDo you want to enter more info?(Y/N):";
    cin>>ans;
  }
}
fout.close();
}
void appenddata()
{
  ofstream fout;
  cout<<"\nEnter the name to write:";
  gets(filename);

fout.open(filename,ios::app|ios::binary|ios::nocreate);
  if(fout==NULL)
  {
    cout<<"\nFile not found, append operation failed";
  }
  else
  {
    char ans='Y';
    while(ans=='Y'||ans=='y')
    {
      f1.getdata();
      fout.write((char *)&f1,sizeof(f1));
      cout<<"\nDo you want to enter more info?(Y/N):";
      cin>>ans;
    }
  }
  fout.close();
}
void readdata()
{
  cout<<"\nEnter the file name to read:";
  gets(filename);
  ifstream fin;
  fin.open(filename,ios::in|ios::binary);
  if(fin==NULL)
  {
    cout<<"\nFile is not present...";
    getch();
    exit(0);
  }
  while(!fin.eof())
  {
    fin.read((char*)&f1,sizeof(f1));
    if(fin.eof())
     break;
    f1.putdata();
  }
  fin.close();
}
```

```cpp
void main()
{
  clrscr();
  int ch;
  cout<<"\n1.To Read Passengers information";
  cout<<"\n2.To Write Passenger information";
  cout<<"\n3.To append Passenger information";
  cout<<"\nEnter your choice:";
  cin>>ch;
  switch(ch)
  {
    case 1:readdata();
          break;
    case 2:writedata();
          break;
    case 3: appenddata();
           break;
    default:cout<<"\nSee the menu properly....";
           break;
  }
 getch();
}
```

```
1.To Read Passengers information
2.To Write Passenger information
3.To append Passenger information
Enter your choice:3

Enter the name to write:data

Enter flight number:12112001

Enter the flight ticket number:5432678910

Enter passengers name:Ramesh

Enter the source of flight:Visakhapatnam

Enter the destination of flight:Delhi

Enter the distance of journey(km):350

Do you want to enter more information(Y/N):n
```

```
1.To Read Passengers information
2.To Write Passenger information
3.To append Passenger information
Enter your choice:1

Enter the file name to read:data

Details of the passenger=1
Flight number=12112001
Flight ticket number=5632147890
Passengers name:ADITYA
Source of flight:DELHI
Destination of flight:VISAKHAPATNAM
Distance of journey(KM):350
Ticket cost:5250

Details of the passenger=2
Flight number=12112001
Flight ticket number=5432678910
Passengers name:RAMESH
Source of flight:VISAKHAPATNAM
Destination of flight:DELHI
Distance of journey(KM):350
Ticket cost:5250
```

```
1.To Read Passengers information
2.To Write Passenger information
3.To append Passenger information
Enter your choice:1

Enter the file name to read:data

Details of the passenger=1
Flight number=12112001
Flight ticket number=5632147890
Passengers name:ADITYA
Source of flight:DELHI
Destination of flight:VISAKHAPATNAM
Distance of journey(KM):350
Ticket cost:5250

Details of the passenger=2
Flight number=12112001
Flight ticket number=5432678910
Passengers name:RAMESH
Source of flight:VISAKHAPATNAM
Destination of flight:DELHI
Distance of journey(KM):350
Ticket cost:5250
```