 **UNIVERSITY OF GUJRAT**

1st Assignment Spring 2017

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| **Course: Object Oriented Programming** | **Section BB** | **Deadline: 17.4.2017** |
| **Course Code: CS-106** |  | **Marks:10** |

* Create class for Book management system to hold book-ID, title of the book , author name ,price of the book, publishing year .Write a program that perform the following operations:   
  //Library Database
* #include <iostream.h>
* #include <conio.h>
* #include <iomanip.h>
* struct library
* {
* char author[20],title[20],pub[20];
* int price;
* library \*next;
* };
* int sum=0;
* void main()
* {
* clrscr();
* library \*head=NULL;
* library \*initial(void);
* //library \*purchase(library \*);
* //library \*sale(library \*);
* void display(library \*);
* void stock(library \*);
* void search(library \*);
* int choice;
* while(1)
* {
* cout<<"Choose your Choice\n";
* cout<<"1) Initial Data Entry\n";
* cout<<"2) Stock of Book\n";
* cout<<"3) Search of Book\n";
* cout<<"4) Display Books\n";
* cout<<"5) Exit\n";
* cout<<"Enter Your Choice:-";
* cin>>choice;
* switch(choice)
* {
* case 1 : head=initial();
* getch();
* break;
* case 2 : stock(head);
* getch();
* break;
* case 3 : search(head);
* getch();
* break;
* case 4 : display(head);
* getch();
* break;
* case 5 : gotoout;
* default: cout<<"\nInvalid Choice\nTRY AGAIN\n";
* }
* clrscr();
* }
* out:
* }
* library \*initial(void)
* {
* clrscr();
* library \*newl=NULL,\*start=NULL,\*end=newl;
* char ch;
* while(1)
* {
* cout<<"\n\nType y or Y for yes\n";
* cout<<"Are you Interested in Entering Entry:-";
* cin>>ch;
* if(ch=='y' || ch=='Y')
* {
* newl=new library;
* cout<<"\n\nEnter Author of Book:-";
* cin>>newl->author;
* cout<<"Enter Title of Book:-";
* cin>>newl->title;
* cout<<"Enter Publication of Book:-";
* cin>>newl->pub;
* cout<<"Enter Price of Book:-";
* cin>>newl->price;
* sum=sum+newl->price;
* if(start==NULL)
* start=newl;
* else
* end->next=newl;
* end=newl;
* end->next=NULL;
* }
* elsebreak;
* }
* return(start);
* }
* void stock(library \*start)
* {
* clrscr();
* int count=0;
* while(start!=NULL)
* {
* count++;
* start=start->next;
* }
* cout<<"\n\n\n\tTotal Number of Books in Stock is "<<count<<endl;
* cout<<"\tPurchase Price of Total Stock is "<<sum;
* }
* void search(library \*start)
* {
* clrscr();
* char author[20],title[20];
* cout<<"Enter Book title and its Author name respectively to Search in stock\n";
* cin>>title>>author;
* while(start!=NULL)
* {
* if(title==start->title)
* {
* if(author==start->author)
* {
* cout<<"\n\nBook is In Stock\n";
* cout<<"It Cost Rs"<<start->price;
* return;
* }
* }
* }
* cout<<"\n\nSEARCH IS NOT IN STOCK\n";
* }
* void display(library \*start)
* {
* clrscr();
* cout<<setw(10)<<"Book Title"<<setw(25)<<"Author of Book"<<setw(25)<<"Publication"<<setw(20)<<"Price"<<endl<<endl;
* for(int i=0;i<40;i++)
* cout<<"=\*";
* cout<<endl;
* while(start!=NULL)
* {
* cout<<setw(10)<<start->title<<setw(25)<<start->author<<setw(25)<<start->pub<<setw(20)<<start->price<<endl;
* start=start->next;
* }
* }