



INDIAN SCHOOL DARSAIT DEPARTMENT OF ICT



Subject: Computer Science

Topic: Binary Files

Worksheet No.:8

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Date:_____

Name of the Student :_____

Class &Div: XII__

Roll Number :_____

1. Given a binary file STUDENT.DAT, containing records of the following class student type
class Student

```
{
    char S_Admno[10]; //Admission number of student
    char S_Name[30]; //Name of student
    int Percentage; //Marks Percentage of student
public:
    void EnterData()
    { gets(S_Admno);gets(S_Name);cin>>Percentage;}
    void DisplayData()
    { cout<<setw(12)<<S_Admno;
      cout<<setw(32)<<S_Name;
      cout<<setw(3)<<Percentage<<endl;}
    int ReturnPercentage(){return Percentage;}
};
```

- a) Write a function in C++, that would read contents from the user and write it into the file.
b) Write a function in C++, that would read contents from the file and display to the user

2. Write a definition for function Economic () in C++ to read each record of a binary file ITEMS.DAT, find and display those items, which costs less than 2500.

```
class ITEMS
{int ID;char GIFT[20]; float Cost;
 public :
 void Get(){
 cin>>CODE;gets(GIFT);cin>>Cost;}
 void See(){
 cout<<ID<<": "<<GIFT<<": "<<Cost<<endl;}
 float GetCost(){return Cost;}
};
```

3. Write a definition for function BUMPER() in C++ to read each object of a binary file GIFTS.DAT, find and display details of those gifts, which has remarks as "ÖN DISCOUNT".

```
class GIFTS{
 int ID;char Gift[20],Remarks[20]; float Price;
public:
 void Takeonstock(){
 cin>>ID;gets(Gift);gets(Remarks);cin>>Price;}
 void See(){
 cout<<ID<<": "<<Gift<<": "<<Price<<": "<<Remarks<<endl;}
 char *GetRemarks() {return Remarks;}
};
```

4. Assuming the class VINTAGE as declared below, write a function in C++ to read the objects of VINTAGE from binary file VINTAGE.DAT and display those vintage vehicles, which are priced between 200000 and 250000.

```
class VINTAGE
{
    int VNO;          //Vehicle Number
    char VDesc[10];  //Vehicle Description
    float Price;

public :
    void GET() {cin>>VNO;gets (VDesc) ;cin>>Price;}
    void VIEW()
    {
        cout<<VNO<<endl;
        cout<<VDesc<<endl;
        cout<<Price<<endl;
    }
    float ReturnPrice() {return Price;}
};
```

5. Write a function in C++ to search and display the details of all flights, whose destination is "Mumbai" from "FLIGHT.DAT". Assuming the binary file is containing objects of class.

```
class FLIGHT{
int Fno; //Flight Number
char From[20] ; //Flight Starting point
char To[20] ; //Flight Destination
public :
char* GetFrom() {return From ;}
char* GetTo() {return To ;}
void Enter() {cin >> Fno ; gets (From) ;gets(To) ; }
void Display() { cout << Fno<< "." << From << "." << To << endl ;}
};
```

6. Write a function in C++ to read and display the detail of all the users whose status is „A“ (i.e. Active) from a binary file "USER.DAT".

```
class USER{
int Uid; // User Id
char Uname[20]; // User Name
char Status; // User Type: A Active I Inactive
public:
void Register( ); // Function to enter the content
void show( ); // Function to display all data members
char Getstatus(){return Status;}
};
```

7. Write a function in C++ to search for a laptop from a binary file "LAPTOP.DAT" containing the objects of class LAPTOP (as defined below). The user should enter the Model No and the function should search and display the details of the laptop.

```
class LAPTOP
{
long ModelNo;
float RAM, HDD;
char Details[120];
public:
void StockEnter ( ) {cin>>Model No>>RAM>>HDD; gets(Details);}
void StockDisplay( ){cout<<ModelNo<<RAM<<HDD<<Details<<endl;}
long ReturnModelNo ( ) { return ModelNo ;}
};
```

8. Given a binary file STUDENT.DAT, containing records of the following class student type

```
class Student
{
    char S_Admno[10]; //Admission number of student
    char S_Name[30]; //Name of student
    int Percentage; //Marks Percentage of student
public:
    void EnterData()
    { gets(S_Admno);gets(S_Name);cin>>Percentage;}
    void DisplayData()
    { cout<<setw(12)<<S_Admno;
    cout<<setw(32)<<S_Name;
    cout<<setw(3)<<Percentage<<endl;}
    int ReturnPercentage(){return Percentage;}
};
```

- Write a function to accept an admission number from user and modify that record in the file
 - Write a function to accept an admission number from user and delete that record from the file
 - Write a function to delete all the records whose percentage is less than 33 from the file
9. Write a function display () in C++ to display all the students who have got a distinction(scored percentage more than or equal to 75) from a binary file "stud.dat", assuming the binary file is containing the objects of the following class:

```
class student
{
int rno;
char sname [20];
int percent;
public:
int rpercent()
{
return percent;
}
```

```

void getdetails()
{
cin>>rno;
gets(sname);
cin>>percent;
}
void showdetails()
{
cout<<rno;
puts(sname);
cout<<percent;
}
};

```

10. Consider the following class Item:-

```

class Item
{
    int ItemId;
    int Quantity;
    float Price;
public:
    voidNewItem()
    {
        cin>>ItemId>>Quantity>>Price;
    }
    void ShowItem()
    {
        cout<<ItemId<<": "<<Quantity<<": "<<Price<<endl;
    }
    void Set_Price(float P)
    {
        Price=P;
    }
    int Ret_Id()
    {
        return ItemId;
    }
};

```

Write a function named Change_Item (int Id, float Pr) to modify the price of the item whose ItemId & new price are passed as an argument.