**Practical no.-**20

**Program no.-** 02

**Title:** Program to write and read object in a file using read and write function.

**Roll No.:**76 **Batch-** C

**Code:**

//Program to write and read array of objects in file using read and write function.

#include<iostream>

#include<fstream>

#include<iomanip>

using namespace std;

class student

{

private:

int roll\_no;

char name[30];

char course[25];

public:

void getData(void)

{

cout<<endl;

cout<<"Enter Roll No: ";cin>>roll\_no;

cout<<"Enter Name: ";

fflush(stdin);

gets(name);

cout<<"Enter Course: ";gets(course);

}

void displayData(void)

{

cout.setf(ios::adjustfield,ios::left);

cout<<setw(8)<<roll\_no;

cout<<setw(30)<<name<<setw(25)<<course<<endl;

}

};

//Main Program

int main()

{

student stud[5]; //create array of objects

ofstream fout; //output stream objects for file

fout.open("Students",ios::out); //open file in write mode

if(!fout)

{

cout<<"Error in creating a file.." <<endl;

return 0;

}

cout<<"\nFile created successfully.."<<endl;

//write 5 objects into a file

for(int i=0; i<5; ++i)

{

stud[i].getData(); //read from user

fout.write((char\*)&stud[i],sizeof(stud[i])); //write object into a file

}

fout.close(); //close a file

cout<<"\nFile saved and closed successfully.."<<endl;

//Reopen file in input mode and read data

ifstream fin; //input stream object for A FILE

//again open a file in a read mode

fin.open("students",ios::in);

if(!fin)

{

cout<<"Error in opening a file..";

return 0;

}

//read objects data from a file

cout<<"\nList of students:\n";

cout<<"R\_No. Name of Student Course\n";

for(int i=0;i<5;++i)

{

fin.read((char\*)&stud[i],sizeof(stud[i]));

stud[i].displayData(); //display object

}

//close a file

fin.close();

return 0;

}

**OUTPUT-**

File created successfully..

Enter Roll No: 10

Enter Name: Nitin

Enter Course: Information Technology

Enter Roll No: 11

Enter Name: Vikas

Enter Course: Data Structure using Python

Enter Roll No: 12

Enter Name: Kiran

Enter Course: Time Management

Enter Roll No: 13

Enter Name: Tejas

Enter Course: Design Making

Enter Roll No: 14

Enter Name: Lokesh

Enter Course: Programming in JAVA

File saved and closed successfully..

List of students:

R\_No. Name of Student Course

10 Nitin Information Technology

11 Vikas Data Structure using Pytho♀

12 Kiran Time Management

13 Tejas Design Making

14 Lokesh Programming in JAVA

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