## FILE HANDLING

1. Write a program in C++ to count the number of uppercase alphabets and number of vowels in a text file “abc.txt”.

## INPUT:

## #include<iostream.h>

## #include<conio.h>

## #include<stdio.h>

## int countupcase()

## {

## ifstream fin(“ABC.txt”);

## int count=0;

## char ch;

## while(!fin.eof())

## {

## fin>>ch;

## if(isupper(ch))

## count++;

## }

## fin.close();

## return count;

## }

## void main ()

## {

## clrscr();

## cout<<”The number of alphabets are “;

## cout<<countupcase();

## getch();

## }

## OUTPUT:

## 

## Write a C++ program to read and write structure emp(eno, ename, edesig, esal) using read() and write() function in a binary file.

## INPUT:

## #include <iostream.h>

## #include <fstream.h>

## #include<conio.h>

## #include<stdio.h>

## class emp

## {

## private :

## int eno,esal;

## char ename[100] ;

## char edesig[100];

## public :

## void readEmployee()

## {

## cout<<"EMPLOYEE DETAILS"<<endl;

## cout<<"ENTER EMPLOYEE ID : " ;

## cin>>eno;

## cout<<"ENTER NAME OF THE EMPLOYEE : "<<endl;

## gets(ename);

## cout<<"ENTER DESIGNATION : ";

## gets(edesig);

## cout<<"ENTER SALARY:"<<endl;

## cin>>esal;

## }

## void displayEmployee()

## {

## cout<<"EMPLOYEE ID: "<<eno<<endl

## <<"EMPLOYEE NAME: "<<ename<<endl

## <<"DESIGNATION: "<<edesig<<endl

## <<"SALARY:"<<esal<<endl;

## }

## };

## void main()

## {

## clrscr();

## emp e;

## e.readEmployee();

## fstream file;

## file.open("Filename.txt",ios::out|ios::binary);

## if(!file){

## cout<<"Error in creating file...\n";

## }

## file.write((char\*)&e,sizeof(e));

## file.close();

## cout<<"Date saved into file the file.\n";

## file.open("Filename.txt",ios::in|ios::binary);

## if(!file){

## cout<<"Error in opening file...\n";

## }

## if(file.read((char\*)&e,sizeof(e))){

## cout<<endl<<endl;

## cout<<"Data extracted from file..\n";

## e.displayEmployee();

## }

## else

## {

## cout<<"Error in reading data from file...\n";

## }

## file.close();

## getche();

## }

## OUTPUT:

## 

## Write a program to delete the record from file having records maintained through classes.

## INPUT:

#include<fstream.h>

#include<iostream.h>

#include<string.h>

#include<conio.h>

#include<stdio.h>

class student

{  int rollno;

char name[5];

float marks;

char grade;

public:

void getdata();

void putdata();

int getrno()

{

return rollno;

}

void delrno()

{ cout<<"Enter the rno to delete  :";

  cin>>rollno;

  }

}s1,s2;

  void stud::getdata(void)

{

    cout<<"Enter the rno   :";

  cin>>rollno;

  cout<<"Enter the name   :";

   gets(name);

   cout<<"Enter the marks   :";

  cin>>marks;

   if(marks>=75) grade ='A';

   else if(marks>=60) grade ='B';

   else if(marks>=50) grade ='C';

   else if(marks>=40) grade ='D';

   else grade='F';

  }

  void stud::putdata(void)

   {

cout<<"\n The rno   :"<<rollno;

       cout<<" \n The name   :"<<name;;

   cout<<"\n The marks   :"<<marks;

   cout<<"\n The grade   ;"<<grade;

   }

void main()

{

clrscr();

char ch='y';

   ofstream fout;

   fout.open("stu.dat",ios::out|ios::binary);

   if(!fout)

   {

   cout<<"cannot open file";

   }

   s1.getdata();

   fout.write((char \* )&s1,sizeof(s1));

   }

   fout.close();

  int rno; char found='f',confirm='n';

char last='y';

  ofstream fout("temp.dat",ios::out);

   ifstream fin("stu.dat",ios::in|ios::binary);

   cout<<"Enter the rollno of student whose record is to be deleted \n";

   s2.delrno();

   while( fin.read((char \*)&s1,sizeof(s1)))

   {

    if(s1.getrno()!=s2.getrno())

   {  if(obj.retAdmno() != n)

        fout.write((char\*)&s1, sizeof(s1));  }

        else

     {s1.putdata();

    cout<<"Are you sure you want to delete this ";

   cin>>confirm;

   if(confirm=='n')

     fo.write((char \* )&s1,sizeof(s1));   }

   }

  fout.close();

  fin.close();

  remove("stud.dat");

   rename("temp.dat","stud.dat");

   fin.open("stud.dat",ios::in);

   cout<<"file now contains \n";

   while(!fin.eof())

    while(fin.read((char\*)&s2,sizeof(s2)))

   {

   s2.putdata();

   if(fin.eof())

    break;

  s2.putdata();

   }

   fin.close();

   getch();

   }

## OUTPUT:

## 

## Write a program to search a record based on rollno in a file that has records maintained through class (rollno ,name, marks, average and grade) and member function to assign grade on the basis of table given below:

## Average Marks Grade

## 90% or more A1

## 89% - 80% A2

## 70% to 70% B1

## 69% to 60% B2

## 59% to 50% C1

## 59% to 40% C2

## Below 40% FAIL

## INPUT:

## #include<fstream.h>

## #include<iostream.h>

## #include<stdlib.h>

## #include<conio.h>

## struct student

## {

## public:

## char name[40];

## char grade;

## float marks;

## int rollno;

## void getdata();

## void display();

## };

## void student::getdata()

## {

## char ch;

## cin.get(ch);

## cout<<"Enter rollno:";

## cin>>rollno;

## cout<<"Enter name:";

## cin>>name;

## cout<<"Enter marks:";

## cin>>marks;

## if (marks>=90)

## grade='A1';

## else if (marks>=89&&marks<=80)

## grade='A2';

## else if (marks>=79&&marks<=70)

## grade='B1';

## else if (marks>=69&&marks<=60)

## grade='B2';

## else if (marks>=59&&marks<=50)

## grade='C1';

## else if (marks>=49&&marks<=40)

## grade='C2';

## else grade='F';

## }

## void student::display()

## {

## cout<<"Rollno:"<<rollno<<"Name:"<<name<<"\t"<<"Grade:"<<grade<<"\t"<<"Marks:"<<marks<<"\t"<<"\n";

## }

## void main()

## {

## clrscr();

## char found = 'n';

## student s1;

## fstream filin;

## filin.open("stu.dat",ios::in|ios::out);

## cout<<"Enter details of a student\n";

## s1.getdata();

## filin.write((char\*)&s1, sizeof (s1));

## filin.seekg(0);

## int rn;

## ifstream fin("stu.dat", ios::in);

## cout<<"enter roll no to be searched for:";

## cin>>rn;

## while(!fin.eof())

## {

## fin.read((char\*) & s1, sizeof(s1));

## if(s1.rollno==rn)

## {

## cout<<s1.name<<",rollno "<<rn<<" has "<<s1.marks<<" % marks and "<<s1.grade<<" grade."<<endl;

## found= 'y';

## break;

## }

## if(found=='n')

## cout<<"rollno not found in file"<<endl;

## }

## fin.close();

## filin.close();

## getche();

## }

## OUTPUT:

## 

## Write a program to append data in a file having records maintained through classes(rollno ,name, marks,average and grade) and member function to assign grade on the basis of table given below:

## Average Marks Grade

## 90% or more A1

## 89% - 80% A2

## 70% to 70% B1

## 69% to 60% B2

## 59% to 50% C1

## 59% to 40% C2

## Below 40% FAIL

## INPUT:

## #include<iostream.h>

## #include<fstream.h>

## #include<conio.h>

## class stu

## {

## int rollno;

## char name[25];

## char Class[4];

## float marks;

## char grade;

## public:

## void getdata()

## {

## cout<<"Roll no: ";

## cin>>rollno;

## cout<<"Name: ";

## cin>>name;

## cout<<"Class: ";

## cin>>Class;

## cout<<"Marks: ";

## cin>>marks;

## if (marks>=90)

## grade='A1';

## else if (marks>=89&&marks<=80)

## grade='A2';

## else if (marks>=79&&marks<=70)

## grade='B1';

## else if (marks>=69&&marks<=60)

## grade='B2';

## else if (marks>=59&&marks<=50)

## grade='C1';

## else if (marks>=49&&marks<=40)

## grade='C2';

## else grade='F';

## }

## void putdata()

## {

## cout<<name<<",rollno "<<rollno<<" has "<<marks<<" % marks and "<<grade<<" grade."<<endl;

## }

## int getrno()

## {

## return rollno;

## }

## }s1;

## void main()

## { clrscr();

## ofstream fo("stu.dat",ios::app|ios::binary);

## char ans='y';

## while (ans=='y')

## {

## s1.getdata();

## fo.write((char\*) &s1, sizeof(s1));

## cout<<"Record added to the file\n";

## cout<<"Want to enter more records? (y/n)..";

## cin>>ans;

## }

## fo.close();

## getche();

## }

## OUTPUT:

## 

1. Write a program to copy all the lines that do not begin with a capital letter to a new file “ABC.txt” from "XYZ.txt".

## INPUT:

#include<iostream.h>

#include<fstream.h>

#include<stdlib.h>

#include<ctype.h>

#include<conio.h>

#include<stdio.h>

void main()

{

clrscr();

fstream file, fout;

char ch, s[100];

file.open("ABC.txt", ios :: out | ios :: app);

if(!file)

{

cout<<"\n File not found.";

getche();

}

cout<<"\n Enter the text to be copied: ";

gets(s);

file.write((char\*)&s, sizeof(s));

cout<<"\n Do you want to add another record? (y/n) ";

cin>>ch;

while(ch == 'y' || ch == 'Y')

{

cout<<"\n Enter the text to be copied: ";

gets(s);

file.write((char\*)&s, sizeof(s));

cout<<"\n Continue adding? (y/n) ";

cin>>ch;

}

fout.open("XYZ.txt", ios :: out);

if(!fout)

{

cout<<"\n File not found.";

file.close();

getche();

}

while(file.eof()==0)

{

file>>s;

fout<<s;

}

cout<<"\n The file has been copied.";

file.close();

fout.close();

getche();

}

## OUTPUT:

