(FILE HANDLING)

(MADE BY ALI AKBER)

(BSCS 2ND SS1)

///CREATING A FILE.

```
#include<iostream>
#include<stdlib.h>
#include<fstream>
using namespace std;
int main(){
	ofstream file;
	file.open("F:\\BSCS.txt",ios::out);
	if (file.fail()==true){
		cout<<"File not found"<<endl;
		exit(1);
	}
	file<<"Hello Class"<<endl;
	file.close();
	return 0;
}
```

Question 1 Write a C++ program to write number 1 to 100 in a data file NOTES.TXT.

```
#include<iostream>
#include<stdlib.h>
#include<fstream>
using namespace std;
int main(){
```

```
	ofstream file;
	file.open("E:\\NOTES.txt",ios::out);
	if (!file){
		cout<<"File not found"<<endl;
		exit(1);
	}
	for(int i=1;i<=10;i++){
		file<<i<<","<<endl;
	}
	file.close();
	return 0;
}
```

///CREATING 5 FIVE NAMES IN THE FILE.

```
#include<iostream>
#include<stdlib.h>
#include<fstream>
using namespace std;
int main(){
	ofstream file;
	file.open("E:\\BSCS.txt",ios::out);
	if (!file){
		cout<<"File not found"<<endl;
		exit(1);
	}
	char name[50];
	for(int i=1;i<=5;i++){
```

```
            cout<<"Enter name:"<<i<<":";
            cin.getline(name,50);
            file<<name<<endl;
        }
        file.close();
        return 0;
}
```

/// Writing the Employees Record into the txt file

```
#include<iostream>
#include<stdlib.h>
#include<fstream>
using namespace std;

int main()
{
        ofstream file("F:\\BSIT 2nd Reg.txt",ios::out);
        if(!file)
        {
            cout<<"File not found"<<endl;
            exit(1);
        }

        int id;
        char name[50];
        float salary;
        char opt;
```

```
	do
	{
		cout<<"Enter id ";
		cin>>id;
		cin.ignore();
		cout<<"Enter Name ";
		cin.getline(name,50);
		cout<<"Enter Salary ";
		cin>>salary;

		file<<id<<"\t"<<name<<"\t"<<salary<<endl;
		cout<<"Do you want to continue (y/n) ";
		cin>>opt;
	}
	while(opt == 'y' || opt == 'Y');

	file.close();
	return 0;
}
```

/// Display the data of file on the Screen. Whole statement

```
#include<iostream>
#include<fstream>
using namespace std;
int main()
{
	ifstream file;
```

```
	file.open("E:\\BSCS.txt",ios::in);
	if(!file)
	{
		cout<<"File not found"<<endl;
		exit(1);
	}
	char ch[100];
	int count=0;
	while(!file.eof())
	{
		file.getline(ch,100);
		cout<<ch<<endl;
		count++;
	}
	cout<<"Count is :"<<count<<endl;
	file.close();
	return 0;
}
```

Question 2 Write a C++ program, which initializes a string variable to the content "Time is a great teacher but unfortunately it kills all its pupils. Berlioz" and outputs the string to the disk file OUT.TXT.

you have to include all the header files if required.

```
#include<iostream>
#include<stdlib.h>
#include<fstream>
using namespace std;
```

```
int main()
{
	ofstream file;
	file.open("E:\\BSCS.txt",ios::out);
	if(!file)
	{
		cout<<"File not found"<<endl;
		exit(1);
	}
	string content="Time is a great teacher but unfortunately it kills all its pupils. Berlioz";
	file<<content;
	file.close();
	return 0;
}
```

/// print all those statement that are start with 'A'.

/// print all those statement that are end with 'r'.

```
#include<iostream>
#include<stdlib.h>
#include<fstream>
#include<string.h>

using namespace std;

int main()
{
```

```
ifstream file("E:\\computer.txt",ios::in);
if(file.fail() == true)
{
	cout<<"File not found"<<endl;
	exit(1);
}

char str[1000];
int count = 0;
while(!file.eof())
{
	file.getline(str,1000);
	/*if(str[0] == 'A' || str[0] == 'a')
	{
		cout<<str<<endl;
		count ++;
	}*/
	int len = strlen(str);
	if(str[len-2] == 'R' || str[len-2] == 'r')
	{
		cout<<str<<endl;
		count ++;
	}
}
cout<<"Total No of Statement "<<count<<endl;
file.close();
```

```
    return 0;
}
```

//Question 3 Write a user-defined function in C++ to read the content from a text file OUT.TXT,

///count and display the number of alphabets present in it.

```
#include<iostream>
#include<stdlib.h>
#include<string.h>
#include<fstream>
using namespace std;
int main()
{
        ifstream file;
        file.open("E:\\BSCS.txt",ios::out);
        if(!file)
        {
                cout<<"File not found"<<endl;
                exit(1);
        }
        char str[1000];
        int count=0;
        while(!file.eof()){
                file.getline(str,1000);
                count= strlen(str);
                count++;
        }
```

```
	cout<<"Total number of alphabets are:"<<count<<endl;
	file.close();
	return 0;
}
```

// counting the all letters from the file

```
#include<iostream>
#include<fstream>
using namespace std;
int main()
{
	ifstream file;
	file.open("E:\\BSCS.txt",ios::in);
	if(!file)
	{
		cout<<"File not found"<<endl;
		exit(1);
	}
	char ch;
	int words=1,vowel=0,number=0,low=0,uper=0,special=0,spaces=0;
	while(!file.eof())
	{
		file.get(ch);
		if(islower(ch))
		{
			low++;
```

```
		}
		else if(isupper(ch))
		{
			uper++;
		}
		else if(isdigit(ch))
		{
			number++;
		}
		else
		{
			special++;
		}
		if((ch=='a' || ch=='A') || (ch=='e' ||ch=='E') || (ch=='i' ||ch=='I') || (ch=='o'
||ch=='O') || (ch=='u' ||ch=='U'))
		{
			vowel++;
		}
		if(ch==' ')
		{
			spaces++;
			words++;
		}
	} //end of while
	file.close();
```

```
	cout<<"Totals words :"<<words<<endl;
	cout<<"Totals Lower :"<<low<<endl;
	cout<<"Totals upperr :"<<uper<<endl;
	cout<<"Totals special :"<<special<<endl;
	cout<<"Totals Numbers :"<<number<<endl;
	cout<<"Totals Vowels :"<<vowel<<endl;
	cout<<"Totals Spaces :"<<spaces<<endl;
	return 0;
}
```

/// converting all upper cases

```
#include<iostream>
#include<fstream>
using namespace std;
int main()
{
	ifstream file;
	file.open("E:\\BSCS.txt",ios::in);
	if(!file)
	{
		cout<<"File not found"<<endl;
		exit(1);
	}
	char ch;
	while(!file.eof())
	{
```

```
            file.get(ch);
            char ch1=toupper(ch);
            cout<<ch1;
        } //end of while
        file.close();
        return 0;
}
```

/// those statement that are start with 'A' store into another file.

```
#include<iostream>
#include<stdlib.h>
#include<fstream>
#include<string.h>

using namespace std;

int main()
{
    ifstream readfile("E:\\computer.txt",ios::in);
    if(readfile.fail() == true)
    {
        cout<<"File not found"<<endl;
        exit(1);
    }

    ofstream writefile("E:\\uni.txt",ios::out);
```

```
    if(!writefile)
    {
        cout<<"File opening fail"<<endl;
        exit(1);
    }

    char str[1000];
    int count = 0;

    while(!readfile.eof())
    {
        readfile.getline(str,1000);
        if(str[0] == 'A' || str[0] == 'a')
        {
            writefile<<str<<endl;
            count ++;
        }
    }
    writefile<<"\n\nTotal No of Statement "<<count<<endl;
    writefile.close();
    readfile.close();
    return 0;
}
```

///QUESTION.

```
#include <iostream>
```

```
#include <fstream>
#include <stdlib.h>
#include <string.h>
using namespace std;
int main()
{

	ifstream firead;
	firead.open("E:\\computer.txt",ios::in);
	if(firead.fail()==true)
	{
		cout<<"File not opened"<<endl;
		exit(1);
	}

	ofstream fiwrite;
	fiwrite.open("E:\\finding.txt",ios::out);
	if(firead.fail()==true)
	{
		cout<<"File not created"<<endl;
		exit(1);
	}

	char ch[1000];
	char finded[10];
```

```
    cout<<"Enter the word that finds into the file (Computer) ";
    cin>>finded;                /// Computer

    while(!firead.eof())
    {
        firead>>ch;
        if(strcmpi(ch,finded) !=0 )
            fiwrite<<ch<<' ' ;
        else if(strcmpi(ch,finded) ==0 )
        {
            char word[50];
            cout<<"Enter New word ";
            cin>>word;
            fiwrite<<word<<' ';
        }
    }

    firead.close();
    fiwrite.close();

    return 0;
}
```

Binary File

```
#include<iostream>
#include<fstream>
```

```
using namespace std;
int main()
{
	ofstream out;
	out.open("E:\\BSCS.txt",ios::binary);
	int no;
	cout<<"Enter no :";
	cin>>no;
	out.write((char*)&no,sizeof(no));
	out.close();
	ifstream in;
	in.open("E:\\BSCS.txt",ios::binary);
	if(!in)
	{
		cout<<"File not found"<<endl;
		exit(1);
	}
	int num;
	in.read((char*)&num,sizeof(num));
	cout<<"Numbber is :"<<num<<endl;
	in.close();
	return 0;
}
```

QNO2.

```
……..
#include<iostream>
#include<fstream>
using namespace std;
class Employee
{
	private:
		int id;
		char name[30];
		float salary;
	public:
		void GetData()
		{
			cout<<"Enter Id :";
			cin>>id;
			cout<<"Enter Name :";
			cin>>name;
			cout<<"Enter Salary :";
			cin>>salary;
		}
		void PutData()
```

```
		{
			cout<<"Id :"<<id<<endl;
			cout<<"Name :"<<name<<endl;
			cout<<"Salary :"<<salary<<endl;
		}
};
int main()
{
	ofstream out;
	out.open("E:\\BSCS.txt",ios::binary);
	Employee emp;
	emp.GetData();
	out.write((char*)&emp,sizeof(emp));
	out.close();

	ifstream in;
	in.open("E:\\BSCS.txt",ios::binary);
	if(!in)
	{
		cout<<"File not found"<<endl;
		exit(1);
	}
	Employee emp1;
	in.read((char*)&emp1,sizeof(emp1));
	emp1.PutData();
	in.close();

	return 0;
}
```

///QNO3.

```
#include<iostream>

#include<fstream>

using namespace std;



class Employee

{

	private:

		int id;
```

```
        char name[30];
        float salary;
    public:
        void GetData()
        {
            cout<<"Enter Id :";
            cin>>id;
            cout<<"Enter Name :";
            cin>>name;
            cout<<"Enter Salary :";
            cin>>salary;
        }
        void PutData()
        {
            cout<<"Id :"<<id<<endl;
            cout<<"Name :"<<name<<endl;
            cout<<"Salary :"<<salary<<endl;
        }
};

int main()
{
    Employee emp[3], em[3];
      ofstream file;
      file.open("E:\\Text.txt",ios::binary);
```

```
    for(int i = 0; i <3; i++)
    {
        emp[i].GetData();
        file.write((char*)&emp[i],sizeof(emp[i]));
    }
    file.close();

    ifstream in;
    in.open("E:\\Text.txt",ios::binary);
    if(in.fail())
    {
            cout<<"File not found"<<endl;
            exit(1);
    }
    cout<<endl;
    for(int i = 0; i <3; i++)
    {
        in.read((char*)&em[i],sizeof(em[i]));
        em[i].PutData();
    }
    in.close();

    return 0;
}
```