

BRAIN INTERNATIONAL SCHOOL

Computer Science Assignment

CLASS XII

OCTOBER' 2018

Chapter-7. Data File Handling in C++

Text Files

- Question 1** Write a C++ program to write number 1 to 100 in a data file NOTES.TXT.
- 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.
- 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.
- Question 4** Write a function to count the number of blank present in a text file named "OUT.TXT".
- Question 5** Write a function to count number of words in a text file named "OUT.TXT".
- Question 6** Write a function in C++ to print the count of word the as an independent word in a text file STORY.TXT.
for example, if the content of the file STORY.TXT is
There was a monkey in the zoo. The monkey was very naughty.

Then the output of the program should be 2.
- Question 7** Write a function in C++ to count and display the number of lines not starting with alphabet 'A' present in a text file "STORY.TXT".
Example:
If the file "STORY.TXT" contains the following lines,
The rose is red.
A girl is playing there.
There is a playground.
An aeroplane is in the sky.
Numbers are not allowed in the password.

The function should display the output as 3.
- Question 8** Assuming that a text file named FIRST.TXT contains some text written into it, write a function named copyupper(), that reads the file FIRST.TXT and creates a

new file named SECOND.TXT contains all words from the file FIRST.TXT in uppercase.

Question 9 Assuming that a text file named FIRST.TXT contains some text written into it, write a function named vowelwords(), that reads the file FIRST.TXT and creates a new file named SECOND.TXT, to contain only those words from the file FIRST.TXT which start with a lowercase vowel (i.e., with 'a', 'e', 'i', 'o', 'u'). For example, if the file FIRST.TXT contains
Carry umbrella and overcoat when it rains
Then the file SECOND.TXT shall contain
umbrella and overcoat it

Binary Files

Question 1 Assuming the class EMPLOYEE given below, write functions in C++ to perform following:
(i) Write the objects of EMPLOYEE to a binary file.
(ii) Read the objects of EMPLOYEE from binary file and display them on screen.

```
class EMPLOYEE  
{
```

```

        int ENO;
        char ENAME[10];
public :
    void GETIT()
    {
        cin >> ENO;
        gets (ENAME);
    }
    void SHOWIT()
    {
        cout <<ENO << ENAME <<endl;
    }
};

```

Question 2 Assuming the class Computer as follows :

```

class computer
{
    char chiptype[10];
    int speed;
public:
    void getdetails()
    {
        gets(chiptype);
        cin>>speed;
    }
    void showdetails()
    {
        cout<<"Chip"<<chiptype<<" Speed= "<<<speed;
    }
};

```

Write a function **readfile()** to read all the records present in an already existing binary file SHIP.DAT and display them on the screen, also count the number of records present in the file.

Question 3 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 in C++, that would read contents of file STUDENT.DAT and display the details of those Students whose Percentage is above 75.

Question 4 Observe the program segment given below carefully and fill the blanks marked as Statement 1 and Statement 2 using seekg() and tellg() functions for performing the required task.

```

#include <fstream.h>
class Employee
{
    int Eno;
    char Ename[20];
public:
    //Function to count the total number of records
    int Countrec();
};
int Item::Countrec()
{
    fstream File;
    File.open("EMP.DAT",ios::binary|ios::in);
    _____ //Statement 1
    int Bytes =
    _____ //Statement 2
    int Count = Bytes / sizeof(Item);
    File.close();
    return Count;
}

```

Question 5 Write a function in C++ to add new objects at the bottom of a binary file "STUDENT.DAT", assuming the binary file is containing the objects of the following class.

```
class STUD
{
    int Rno;
    char Name[20];
public:
    void Enter()
    {cin>>Rno;gets(Name);}
    void Display()
    {cout<<Rno<<Name<<endl;}
};
```

Question 6 Observe the program segment given below carefully and fill the blanks marked as Statement 1 and Statement 2 using seekp() and seekg() functions for performing the required task.

```
#include <fstream.h>
class Item
{
    int Ino;
    char Item[20];
public:
    //Function to search and display the content from a particular
    //record number
    void Search(int );
    //Function to modify the content of a particular record number
    void Modify(int);
};
void Item::Search(int RecNo)
{
    fstream File;
    File.open("STOCK.DAT",ios::binary|ios::in);
    _____ //Statement 1
    File.read((char*)this,sizeof(Item));
    cout<<Ino<<"=="<<Item<<endl;
    File.close();
}
void Item::Modify(int RecNo)
{
    fstream File;
    File.open("STOCK.DAT",ios::binary|ios::in|ios::out);
    cout>>Ino;
    cin.getline(Item,20);
```

```
        _____ //Statement 2  
File.write((char*)this,sizeof(Item));  
File.close();  
}
```