Assignment02

Sep21/ CPP/Assignment02

CPP

Diploma in Advance Computing

September 2021

1. Write a program to design class Time with data members (hh,mm,ss).Write appropriate member functions. Overload operator '+' and '-' for Time class. Write appropriate member functions so that correct time is displayed as per 24 hour clock.

2. Write a program to overload accept function as below

void accept(char ch,int len) - which accepts string character by character until then length.

void accept(char [])-Which accepts the string directly.

Write main() to call these two functions.

3. Write a Program to overload Copy function as below.

Void copy(int dest[],int source[]) –Integer array source should get copied to dest.

Void copy(char dest[], char source[])-Source string should get copied to destination.(Do not use built-in functions.

4. Define a class Report with the following specification:

Data members: Private

Dno - 4 digit integer admission number

name - 20 characters

marks - an array of 5 floating point values

average - average marks obtained

GETAVG() - a function to compute the average obtained in five subject.

Member function: Public

No argument constructor which initialize all members to 0.

Parameterized constructor as Report (int adno, char name [], float marks []) (Make use of this keyword).

readInfo() - function to accept values for adno, name, marks. Invoke the function GETAVG()

displayInfo() - function to display all data members of report on the screen.

You should give function definitions. Create the object of this class on heap.

5. Create a class Test with int rollNo; char name[10]; float marks[3]; as data members in private .and it has below member functions in it.

1. No argument constructor assign 0 to all members

2. Paramterized constructor - Test(int, char [],float []);

3. void accept() –Which accept all the details from user.

4. void display()-Display all the details from user.

5. void calculateAvg()- Calculate the average and print it.Write a client code (i.e main() function) to call these functions using Test class object.

6. Create a class batsman with the following specifications:

Private members:

bcode 4 digits code number

bname 20 characters

innings, notout, runs integer type

batavg it is calculated according to the formula –

batavg =runs/(innings-notout)

calcavg() Function to compute batavg

Public members:

Write No argument constructor to initialize the object.

readdata() Function to accept value from bcode, name, innings, notout and invoke the function calcavg().

displaydata() Function to display the data members on the screen.

In client code store n batsman details take number from User. Allocate memory on heap to the object .

7. Define a class in C++ with following description:Flight

Private Members

A data member Flight number of type integer

A data member Destination of type string

A data member Distance of type float

A data member Fuel of type float

A member function CALFUEL() to calculate the value of Fuel as per the following criteria

Distance Fuel

<=1000 500

more than 1000 and <=2000 1100

more than 2000 2200

Public Members

1. A function FEEDINFO() to allow user to enter values for Flight Number, Destination, Distance.

2. all function CALFUEL() to calculate the quantity of Fuel.

3. A function SHOWINFO() to allow user to view the content of all the data members.

4. Create and store information of 3 flights .