

# C++ Assignment

Anubhav Mehra

*<2020-05-28 Thu>*

## 1. Define a class student with the following specification

Private members of class student

admno	integer
sname	20 chars
eng	float
math	float
science	float
total	float
ctotal()	a function to calculate eng + math + science with float return type

Public member function of class student

Takedata() Function to accept values for admno, sname, eng, science and invoke ctotal() to calculate total.

Showdata() Function to display all the data members on the screen.

## 2. Define a class batsman with the following specifications:

Private members:

bcode	4 digit code number
bname	20 chars
innings	int
notout	int
runs	int
batavg	float (calculated using formula $\text{batavg} = \text{runs} / (\text{innings} - \text{notout})$ )
calcavg()	function to compute batavg

Public members:

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

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

### 3. Define a class TEST in C++ with following description:

Private Members:

Testcode	int
Description	string
NoCandidate	int
CenterReqd(No. of centers required)	int
CALCNTR()	a function to calculate and return the number of centers as (No. of centers required - No. of centers available)

Public Members:

A function SCHEDULE() to allow user to enter values for TestCode, Description, NoCandidate & call function CALCNTR() to calculate the number of Centres

A function DISPTST() to allow user to view the content of all the data members

### 4. Define a class in C++ with following description:

Private Members:

Flight	int
Destination	string
Distance	float
Fuel	float
CALFUEL	a function 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:

A function FEEDINFO() to allow user to enter values for Flight Number, Destination, Distance & call function CALFUEL() to calculate the quantity of Fuel

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

## 5. Define a class BOOK with the following specifications :

Private members:

BOOK NO	int
BOOKTITLE	20 chars
PRICE	float
TOTALCOST()	A function to calculate the total cost for N number of copies where N is passed to

Public members:

INPUT() function to read BOOK<sub>NO</sub>. BOOKTITLE, PRICE

PURCHASE() function to ask the user to input the number of copies to be purchased. It invokes TOTAL<sub>COST</sub>() and prints the total cost to be paid by the user.

Note : You are also required to give detailed function definitions.