

HOLIDAY HOME WORK
COMPUTER SCIENCE-class 12

1. Define class CABS with following specifications:

Datamembers

CNo – to store CabNo

Type – to store a character 'A', 'B', or 'C' as City type

Pkm – to store per kilo meter charges

Dist – to store distance travelled (in km)

Member functions

A constructor function to initialize type as 'A' and Cno as '1111'

A function charges() to assign pkm as per the following table:

Type	Pkm
A	25
B	20
C	15

A function Register() to allow administrator to enter the values for Cno and type. Also, this function should call charges() to assign pkm charges.

A function showcab() to allow user to enter the value of distance and display cno, type pkm, pkm * distance (as amount) on screen.

2. Answer the questions (i) and (ii) after going through the following class:

class Exam

{

int Marks; char Subject[20];

public:

Exam()

{ } //Function 1

Exam(char S[])

{.....} //Function 2

Exam(int M)

{.....} //Function 3

Exam(char S[], int M) //Function 4

{.....}

i. Which statements in C++ that would execute Function 3 and Function 4 of class Exam.

ii. Which feature of Object Oriented Programming is demonstrated using Function1, Function 2, Function 3 and Function 4 in the above class Exam?

iii. Give definition statements for function1, function2, function3 and function 4.

iv Define copy constructor also for the above class.

3. Answer the questions (i) to (iv) based on the following codes

<pre> Class Drug { char category[10]; char dt_of _manufacture[10]; char Company[20]; Public: Drug(); Void enterdrugdetails (); Void showdrugdetails (); } </pre>	<pre> class Tablet : public drug { protected: char tablet_name[30]; char volume_label[20]; public: float Price; Tablet(); Void enter tab_details(); } </pre>	<pre> Void showtab_details(); }; class PainReliever:public tablet { intdosage_units; char side_effects[20]; intuse_within_days; public: PainReliever(); void enterdetails(); void showdetails(); }; </pre>
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- (i) How many bytes will be required by an object of class Drug and an object of class PainReliever respectively?
- (ii) Write names of all the data members which are accessible from the object of class PainReliever.
- (iii) Write names of all the members accessible from member functions of class Tablet.
- (iv) Write names of all member functions which are accessible from objects of class PainReliever.

4.

<pre>class CUSTOMER { intCust_no; char Cust_Name[20]; protected: void Register(); public: CUSTOMER(); void Status(); }</pre>	<pre>class SALESMAN { intSalesman_no; char Salesman_Name[20]; protected: float Salary; public: SALESMAN(); void Enter(); void Show(); }</pre>	<pre>class SHOP : private CUSTOMER , public SALESMAN { char Voucher_No[10]; char Sales_Date[8]; public: SHOP(); void Sales_Entry(); void Sales_Detail(); }</pre>
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- (i) Write the names of data members which are accessible from objects belonging to class CUSTOMER.
- (ii) Write the member functions that are accessible from objects belonging to class SALESMAN.
- (iii) Write the names of all the members which are accessible from member functions of class SHOP.
- (iv) How many bytes will be required by an object belonging to class SHOP?

5. Write a function in C++ to count the number of vowels present in a text file.

6. Write a function in C++ to count the number of words in a text file

NOTES.TXT.

7. Write a function in C++ to count the number of lines present in a text file

“STORY.TXT”.

8. Write a function in C++ to read & display the details of all the members whose membership type is ‘L’ or ‘M’ from a binary file “CLUB.DAT”. Assume the binary file contains object of class CLUB.

```
class CLUB
{
intmno; char mname[20]; char type;
public:
void register (); void dis();
charwhattype()
{ return type;}
};
```

9. Write a function in C++ to read and display the detail of all the users whose status is ‘A’ (i.e. Active) from a binary file “USER.DAT”. Assuming the binary file “USER.DAT” is containing objects of class USER, which is defined as follows :

```
class USER
{
intUid; //User Id
charUname [20]; //User Name
char Status; // User Type : A Active I Inactive
public:
void Register(); //Function to enter the content
void show(); //Function to display all data members
charGetstatus () {return Status;}.
};
```