

2022

Smt K.B.Parekh College of Computer Science-Mahuva

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Assignment-3

***this assignment include program related to following topics**

- ✓ inheritance
- ✓ virtual function

1	24-10-2019 Set-15	Make one class "MATCHES" with data members like Player_Name, No_of_Matches_Played. Inherit that class into "TEST", "ONEDAY" and "T20" Classes. Use appropriate data members into these classes to calculate average run of the player.	30
2	04-12-2019 Set-2	<p>Write a c++ program to create class STUDENT which contains data members such as s_name,s_roll. And appropriate method getting data.</p> <p>Create class TEST which derived from STUDENT, it contains members such as marks of sub1 and sub2. To define appropriate method for getting data.</p> <p>Create another class called RESULT which derived from class TEST which contains member such as total_marks. It also contains an appropriate method for calculating total_marks and display all the information of the student.</p>	25
3	23-10-2019 Set-13	<p>Q-3 Create a C++ program that contains a class SUPPLY. It has city, total_sales and sales_person as data members. Now, create two classes Ahmedabad and Jamnagar which inherit class SUPPLY. Now calculate and display sales person requirement in particular city according to the following conditions</p> <p>(1) 2 sales person can only sale upto 20000. (2) More than 20000 sales, appoint new sale person. (3) If sales is less than 5000 no new appointment of sale person.</p>	30
4	24-10-19 Set-14	<p>Q-3 Write a C++ program for below inheritance. Here result class should display total of External and Internal performance points. [Use Virtual Function].</p> <div style="text-align: center;"> <pre> graph TD Employee[Employee] Internal[Internal performance] External[External Performance] Result[Result] Internal --> Employee External --> Employee Internal --> Result External --> Result </pre> </div> <p>[You are free to take data members and member functions]</p>	30
5	22-10-19 Set-6	<p>Q-3 Write a program that create a base class game. Class game has 3 sub classes called badminton, volleyball and cricket. All the subclasses has same methods getpoint() and displaypoint (). Display data using polymorphism concept in C++.</p>	30

6	22-10-19 Set-5	<pre> classDiagram class Product { P_code p_name } class Stock { update() } class Sales { Sell_pro() } class Purchase { Purchase_pro() } Product --> Stock Stock --> Sales Stock --> Purchase </pre> <p> ✓ In stock class update () will be updated based on sales purchase of product. ✓ You are free to take necessary data members and member functions. </p>	30
7	22-4-19 Set-A	<p>Create C++ program using following details.</p> <p>Base Class:- Media Members:- title, price</p> <p>Following Classes are derived from base class “Media”</p> <p>Class :-Harddisk Members:- hdd_type, qty</p> <p>Class: pendrive Members: pendrive_type,qty</p> <p>Initialize and take data using constructor only and display information using display ().</p>	30
8	22-4-19 Set-B	<p>Q-3 Perform Following task using inheritance in OOP.</p> <pre> classDiagram class Vehicle { Color vehical_no } class scooter { type(bike, moped) price } class Bill { discount (7 % on price) tax (4% on price) } class Payment { Give additional discount of 2% on moped and 3 % on bike and display total amout } Vehicle --> scooter Vehicle --> Bill scooter --> Payment Bill --> Payment </pre>	30

9	21-10-19 Set-3	<p>Q-3 Create a class shape. Create derived classes circle, square and rectangle which are use to find area of particular shape. Write a program to perform given task using virtual function. (You are free to take necessary data members and member functions).</p>	30												
10	11-12-19 Set-8	<p>Q-4 Write a C++ program to enter number of records of various CARS and display it using Multilevel Inheritance.</p> <p>Hint:</p> <table border="1"> <tr> <td>class First</td><td>1. Car name</td><td>class Second</td><td>1. Car No</td></tr> <tr> <td></td><td>2. Model</td><td></td><td>2. Year</td></tr> <tr> <td>class Third: Public Second</td><td></td><td>public: void getdata()</td><td>void putdata()</td></tr> </table>	class First	1. Car name	class Second	1. Car No		2. Model		2. Year	class Third: Public Second		public: void getdata()	void putdata()	30
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	2. Model		2. Year												
class Third: Public Second		public: void getdata()	void putdata()												
11	10-12-18	<p>Write a C++ program using following structure to implement concept of Late Binding. Here Media, Book, Tape are class names.</p> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 300px;"> <p style="text-align: center;"><u>Media</u></p> <p>Data Members: float price, char title[50]</p> <p>Member Function: Constructor and void display()</p> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p style="text-align: center;"><u>Book</u></p> <p>Data Members: int pages</p> <p>Member Function: Constructor and void display()</p> </div> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p style="text-align: center;"><u>Tape</u></p> <p>Data Members: float time</p> <p>Member Function: Constructor and void display()</p> </div> </div> </div>	30												
12	5-12-17 Set-5	<p>Write a c++ program to calculate total and percentage of student. Also use appropriate member function to display student result data.</p> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 200px;"> <p style="text-align: center;">STUDENT</p> <hr/> <p style="text-align: center;">Student basic details</p> </div> <div style="margin: 10px auto; width: 20px; text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 200px;"> <p style="text-align: center;">TEST</p> <hr/> <p style="text-align: center;">Marks of three</p> </div> <div style="margin: 10px auto; width: 20px; text-align: center;">↓</div> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 200px;"> <p style="text-align: center;">RESULT</p> <hr/> <p style="text-align: center;">Total, percentage</p> </div> </div>	30												

