

Time : 3:00 Hours

Marks : 100

Q - 1 Create a class called "TIME" that has separate *int* member data for hours, minutes, and seconds. One constructor should initialize this data to 0, and another should initialize it to fixed values. A member function should display it, in 11:59:59 format. The final member function should add two objects of type *tie* passed as arguments. A main () program should create two initialized time objects, and one that isn't initialized. Then it should add the two initialized values together, leaving the result in the third time variable. Finally it should display the value of this third variable. [30]

Q - 2 Create a class called "Employee" which contains following data members [20]
Emp_No, Emp_Name, Dept_Name, Salary, TA, DA, PF, Net_Salary
Write Constructor to get data and display data for a class and display Employee detail. Calculate TA : 10%, DA : 12%, PF : 8% and find out Net_Salary

Q - 3 Create table "WORLD" as per following information and construct queries. [20]

Country	Capital	Continent	GDP(IN \$)	Population
India	Delhi	Asia	5450	1,75,000
United States of America	Washington D.C.	North America	53000	3,20,640
Japan	Tokyo	Asia	36600	1,26,910
Singapore	Singapore City	Asia	78700	5,46,970
Australia	Canberra	Australia	45100	2,37,790

1. Display country with its capital and continent.
2. Display the country and its population with the highest GDP.
3. Display the country from continent Asia.
4. Display country with in descending order of its population.
5. Display the capital of the country which has highest population and lowest GDP.

Q - 4 Write query to produce output for following instances using "Bowler" and "Batsman" [30]

Table : Bowler

Name	Surname	Country	Wickets
MITCHELL	STARC	AUSTRALIA	22
TRENT	BOULT	NEWZEALAND	22
UMESH	YADAV	INDIA	18
MORNE	MORKEL	SOUTH AFRICA	17
MOHAMMAD	SHAMI	INDIA	17

Table : Batsman

Name	Surname	Country	Runs
MARTIN	GUPTIL	NEWZEALAND	547
KUMAR	SANGAKKARA	SRILANKA	541
AB	DE VILLIARS	SOUTH AFRICA	482
BRENDON	TAYLOR	ZIMBABWAVE	433
SHIKHAR	DHAVAN	INDIA	412

1. Display record for highest wicket taker from "Bowler" table.
2. Display Name and Surname of highest wicket taker and height run getter from country Australia.
3. Display players' records who scored more than 500 runs from "Batsman" table
4. Display the count of players from country "INDIA" from both tables.
5. Display the player name whose first character is 'M' from both the tables.