Dezyne École College
C++ Programming with Object Oriented System
Assignment Question

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1. **Write a program to input gross amount from user and calculate net amount of television**
   If TV is Colored:
   A – Size 21" discount – 10%
   B – Size 32" discount – 20%
   If TV is B&W
   Discount – 15% using Nested it.

2. **WAP to input a number from user and check number is Armstrong or not using while loop.**

3. **Write a program in C++ to calculate the series (1) + (1+2) + (1+2+3) + (1+2+3+4) + ... + (1+2+3+4+...+n).**

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   Sample Output:
   Input the value for nth term: 5
   1 = 1
   1+2 = 3
   1+2+3 = 6
   1+2+3+4 = 10
   1+2+3+4+5 = 15
   The sum of the above series is: 35
   ```

4. **Write a program to input 10 elements from user and find second maximum element?**

5. **WAP to input 10 unique elements from user and print it, if you enter repeated element, system not accept the repeated value and pointer again go to previous position.**

6. **Write a program to input two 3*3 matrix from user and multiply it? (Take all input from user, both arrays rows and columns and elements. Also check multiplication is possible or not.).**

7. **Write a code for input a number and print it in for following format. (For Eg: if you enter 123 – Then output is 1, 12, 123, 2, 23,3).**

8. **Write a program to input 10 elements from user and insert in new array element of a given position by the user?**

9. **Write a code for input a string from user and print it in for following format. (For Eg: if you enter dog – Then output is d, do, dog, o , og, g).**

10. **Write a C++ Code for input a multi word string form user and print into a perticular format using funciton. Example : Hello World – Output – World Hello.**

11. Write a program to create two classes and insert 3*3 matrix in both class and multiply it using friend function?

12. WAP to input a binary digit from user and print its decimal number using constructor.

13. WAP to input employee name and code in base class department and city in first base derived class and basic salary in second base derived class and calculate its net salary if HRA = 114%, DA = 60% and IT = 10% and print in derived class with all details of employee using hybrid inheritance.

14. WAP to input a four digit number from user and multiply all prime digits available in number using single level inheritance with constructor.

15. WAP for check password is perfect or not. (Password contain at least one Small & Capital alphabet, 1 symbol and 1 number, minimum 8 characters).

16. Write a C++ program to which reads n digits chosen from 0 to 9 and counts the number of combinations where the sum of the digits equals to given number. Do not use the same digits in a combination. For example, the combinations where n = 2 and s = 5 are as follows:

    0 + 5 = 5

    1 + 4 = 5

    3 + 2 = 5

17. Write a C++ program to sum of all positive integers in a sentence. Sample string: There are 12 chairs, 15 desks, 1 blackboard and 2 fans.
    Output: 30

18. Write a C++ Program to input a number from user and perform swapping between even and odd position values. (Example: Input: 4159, Ouput: 1495, Input: 215, Ouput: 125)

19. WAP to create a file named "Student1" and open in append mode, then insert student details (id (auto id), name, class) and save into file.

20. Create a Project on Student Information System using Menu Driven Programming. Create Module Add Student, Show Student, Delete Module, Modify Module, Search Module, Recover deleted data module and exit module. Create a project with proper formatting and alignment. Also apply do you want to continue concept.