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| Subject code & Name | : | **CE144 – Object oriented programming with C++** | Practical | : | **2** | Academic Year | : | **2022-2023** |
| ID | : | **22CS044** | Name | : | **Shruti Panchal** | | | |

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| ***Practical Set - 2*** |
| **Aim 2.1:** Write a C++ Program to declare the struct named College\_Details, by taking following data members:  char college\_name[10]; (eg. CHARUSAT)  char college\_code[10]; (eg. CSPIT/DEPSTAR)  char deparment[5]; (eg. CE/CS/IT)  int intake; (eg. 120)  Collect the data from keyboard and display the same in appropriate View.  **Expected Output:** |
| ***Code*** |
|  |
| ***Output*** |
|  |
| ***Question-Answers*** |
| **1.** **Are you able to find the concept of struct that you studied in C Programing, similar to class? If yes, then in which ways?**  **Ans.**  I found that the concept of structure is not exactly similar to class in. A class is a user-defined blueprint or prototype from which objects are created. |
| **Aim 2.2:** Write a C++ program to collect the details of student like roll\_no, name, class and division(A/B) and display the same of 5 students. Declare the following data members in class as public: roll\_no, name, class and division(A/B). Make use of two functions read and display as public for collecting information and displaying it respectively.  **Note:** Create 5 different objects for 5 students**.**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Sr.No.** | **Name** | **Roll No** | **Class** | **Division(A/B)** | | **1.** | **Demon** | **44** | **12** | **A** | | **2.** | **Stefan** | **53** | **11** | **A** | | **3.** | **Elena** | **54** | **11** | **B** | | **4.** | **Caroline** | **45** | **11** | **B** | | **5.** | **Bonnie** | **43** | **11** | **B** |   **Expected Output:** Fill the following table to showcase your outcome, also attach the screenshot of output. |
| ***Code*** |
|  |
| ***Output*** |
|  |
| ***Question-Answers*** |
| 1. **State the reason for creating object of class.**   **Ans.** We are creating objects to use data members and member function of the class which has been created. |
| **Aim 2.3:** Write a C++ program to swap two numbers without using third variable, using the concept of class and object. Display the values of the variables before and after swapping.  **Expected Output:**  Attach the screenshot of output and fill up the below given table.   |  |  |  |  | | --- | --- | --- | --- | | **Sr.No.** | **Outcome** | **Variable\_1 value** | **Variable\_2 value** | | **1.** | **Before Swapping** | **24** | **35** | | **2.** | **After Swapping** | **35** | **24** | |
| ***Code*** |
|  |
| ***Output*** |
|  |
| **Faculty Signature: Grade:** |