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| animatedLOGO | **Assignment No. 2 Semester: Spring 2020**  **CS201 – Introduction to Programming** | | **Total Marks: 20**  **Due Date:**  **16-6-2020** |
| **Instructions**  **Please read the following instructions carefully before submitting assignment:**  **It should be clear that your assignment will not get any credit if:**   * ***Assignment is submitted after due date.*** * ***Submitted assignment does not open or file is corrupt.*** * ***Assignment is copied (From internet/students).***   **Software allowed to develop Assignment**   * **Dev C++**   ***Objectives:***  *In this assignment, the students will learn:*   * *How to fill / populate a two-dimensional array using given source data.* * *How to write user defined functions and pass an array to them as parameter.* * *How to use if statement and do while loop.* * *How to calculate the percentage in elements of array.* * *How to display array elements.*   **Assignment Submission Instructions**  You are required to submit only **.cpp** file on the assignments interface of CS201 at VU-LMS. ***Assignment submitted in any other format will not be accepted and will be graded zero marks.*** | | | |
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| **Problem Statement**  Write a menu in C++ which should show the country code and name at the start of application:   * 1. Press 0 for Pakistan.   2. Press 1 for China.   3. Press 2 for Italy.   4. Press 3 for UK.   5. Press 4 for Iran.   6. Press 5 for France.   7. Press 6 for Turkey.   8. Press 7 to exit.   **Instructions to write C++ program:**   * *Write functions to calculate % of recovered patients, % of deaths in specific country . Following function names should be used for consistency.*  |  |  | | --- | --- | | *To display all elements in matrix form* | showElements( ); | | *Percentage of death* | PercentageDeath ( ): | | *Percentage of recovered* | PercentageRecovered(); |   **Source data:**   |  |  |  |  | | --- | --- | --- | --- | | Country Code | Total Cases | Total Deaths | Total Recovered | | 0 | 560,433 | 22,115 | 32,634 | | 1 | 156,363 | 19,899 | 34,211 | | 2 | 84,279 | 10,612 | 0 | | 3 | 82,160 | 3,341 | 77,663 | | 4 | 71,686 | 4,474 | 43,894 | | 5 | 56,956 | 1,198 | 3,446 | | 6 | 5,374 | 93 | 1095 |   **Sample Output:**  First, user will call the *showElements()* method to display all the data in matrix form:  Then, it will display a menu to calculate the percentage of dead and recovered persons for specific country:    If user presses 0 then it will show the percentage of dead and recovered persons for Pakistan:    If user presses 1 then it will show the percentage of dead and recovered persons for China:    If the user enters option other then 0 to 7. Following messages display:  Choice should be between 0 and 7  Invalid choice, please select again:    Good Luck |
| ***Lectures Covered:*** *This assignment covers Lecture # 11-15.*  ***Deadline:*** *The deadline to submit your assignment solution is* ***16-6-2020****. Your assignment must be submitted within the due date through VU-LMS. No assignment will be accepted through email after the due date.* |