

Programming Fundamentals Lab

Lab 10

Marks 100

Instructions

Work on this lab individually. You can use your books, notes, handouts etc. but you are not allowed to borrow anything from your peer student.

Submission

Put all the files of your solution in a zipped folder labeled with your **roll number**.

Upload the zipper file solution(s) folder at Google classroom (<https://classroom.google.com>) by **Thursday, April 30, 2020** before **05:00 PM**. No submission will be accepted after this deadline.

Please use your **email account at PUCIT domain** and the following code to join the class:

Code: 2oosi22

What you have to do

Program the following tasks in your C++ compiler and then compile and execute them. The name of your files will be according to the task given in this lab.

Task 1

[20]

Write a program that lets the user to **enter the marks of 10 quizzes** of a student into an array of **integers**. The program should **calculate and display the total** of all the student's quizzes.

Task 2

[20]

Write a program that lets the user **enter the total rainfall for each of 12 months** into an array of **doubles**. The program should display the month having **highest rainfall** in the year.

Task 3

[30]

Write a program that lets the user to **enter 10 integers** into an array. The program should **add pairs of elements together**, starting with elements at index 0 with 1, 2 with 3, 4 with 5 and so on. **Save** all the results into a separate array and **display** the values of resulting array.

For example, the input array with values

{1, 2, 3, 4, 5, 6, 7, 8, 9, 10} results in the output array as {3, 7, 11, 15, 19}.

Task 4

[30]

The local Driver's License Office has asked you to write a program that **grades** the written portion of the **driver's license exam**. The exam has **10 multiple choice** questions.

Here are the correct answers:

Question	1	2	3	4	5	6	7	8	9	10
Answer	4	1	2	1	3	2	1	4	3	2

Your program should **store** the correct answers shown above in an **array**. It should **ask** the user to **enter the student's answers** for each of the 10 questions, and the **answers should be stored in another array**. After the student's answers have been entered, the program should **display a message** indicating whether the student **passed or failed** the exam. A student must correctly answer **6** of the **10** questions to **pass** the exam.

It should then display the

- total number of **correctly answered** questions
- total number of **incorrectly answered** questions
- list showing the **question numbers** of the incorrectly answered questions.

☺ ☺ ☺ **BEST OF LUCK** ☺ ☺ ☺