

## Introduction to Computing Lab

### Assignment # 05:

Marks: 10

Due Date: 19th, November 2017

**NOTE:** Do not email me assignments but on slate. Hand written/ Scanned assignments will not be accepted.

#### Question#01:

Write and run a program that reads a six-digit integer and prints the sum of its six digits. Do not use loops only do it using if-else.

Bonus: if number length is less or greater than six then print error on console.

Sample Input: **690125**

Sample output: **23**

#### Question#02:

Expand the below sum series up to four terms and store the result into variable x without using any loop

$$x = \sqrt{\sum_{n=1}^4 \frac{2n^3 + 3n^2 + \sqrt{n}}{5n^3}}$$

#### Question#03:

Write a C++ documented program to perform the role of a quiz maker. The program should display True/False questions, record user's answers, keep the time, and record the scores and more.

Execution of the program should be similar to this:

1. Prompt the user to enter his/her name, ID number, and then start the quiz.
2. There would be total of 10 random questions, each question contains 10 marks.
3. Display first question
4. Get answer from the user
5. Update user's score if he answered correctly
6. Display next question
7. Repeat steps 4, 5, and 6 until the final question.
8. Record the user's name and ID, total score, and detailed answers into some variables and show them to the screen at the end of quiz.
9. Extra credits if your program provides a login option before starting the quiz.

#### Requirements:

1. In each quiz, your program should display 10 unique questions (no repeats)
2. Users have 10 minutes to complete the quiz, after 10 minutes the program should automatically terminate the quiz and report the outputs to screen.

**Sample:**

```
WELCOME
  to
THE GAME

BECOME A MILLIONAIRE!!!!!!!!!!!!

> Press S to start the game
> Press U to view the highest score
> Press R to reset score
> press H for help
> press Q to quit
```

Good Luck 😊