CSC 340.02 - Spring 2022 - Assignment 1
Due: Friday 02/11/2021 11:55pm
Grade: 75pt - 15%

Part A: pdf report. Follow instruction below and include screenshots/answers in this pdf report (20pt)

1. Introduction (15pt)
    a. Login iLearn, reply to "Welcome to CSC 340!" post with a picture and a short introduction of yourself, take a screenshot and include it in your assignment report.
    b. Reply to a post after yours in the forum. If you're the last person, reply to the first post. Take a screenshot and include it in your assignment.

2. Acknowledge that you read the syllabus, especially the Academic Integrity section. (5pt)

3. Screenshot of your coding environment setup (part B.1)

Part B: Development environment setup and first C++ program (30pt)

1. Setup your coding environment. (15pt)
    a. Install an IDE or a modern text editor of your choice
    b. Configure your IDE/editor to use `clang` compiler
    c. Take screenshots of your setup and include them in the assignment report.

2. Write a C++ program that inputs a five-digit integer, separate the integer into its digits and print them separated by the three spaces each.

    - For example, if user types in 32837, the program should print: (10pt)

    ```
    3    2    8    3    7
    ```

- Code style: (3pt)
  - File comments: at the beginning of all files

```
1 // Copyright 2021 - <your name>
2 // Email: <your sfsu email>
3 // This file is part of CSC 340 - Assignment <#>
```

  - 2 spaces indentation
  - Variable names: lowercase with underscore.

- Add a summary comment at the beginning of your program and a //TODO comment above the block of code that you think can be improved (2pt)

```
// TODO: ...
```

Part C: Coding exercise (25pt)

Find the longest increasing subsequence in an array

Write a function that takes a built-in array as an input and finds the longest increasing subsequence of that array. Write a driver program to test your function by asking the user to input 10 digits and output the longest increasing subsequence of those.

Input: [1, 2, 3, 5, 3, 1, 7, 10, 6, 31]
Output: [1, 2, 3, 5]