

Assignment 1

DDL: 11:59pm, Oct 8, 2023

Note: Late homework assignments will not be accepted, unless you have a valid written excuse (medical, etc.). You must do this assignment alone. No team work or "talking with your friends" will be accepted. No copying from the Internet. Cheating means zero. Here are a few extra instructions:

Give meaningful names to your variables so we can easily know what each variable is used for in your program.

Put comments in your code (in English!) to explain WHAT your code is doing and also to explain HOW your program is doing it.

Make sure all your code is properly indented (formatted). Your code should be beautiful to read.

Write a program in C++ to complete the following tasks:

Task 1

Print out welcome text in separate lines.
Here is the author's sample output:

```
--- Task 1 ---  
Welcome to UIC!  
Writing C++ programming makes me happy!
```

Task 2

There is a char type variable named ch with default value a. Please display its next nth character where nth is the last two-digit of your student id number.
Here is the author's sample output:

```
--- Task 2 ---  
char ch current value is a  
char ch after the 20 character is u
```

Task 3

Calculate the volume of a sphere. Please choose the last three-digit of your student ID as radius following the rules. For example, suppose the last three-digit is 102 , and then use it as floating point number 10.2 for the radius value. Note, $\pi = 3.14$ for this task. Here is the author's sample output:

```
--- Task 3 ---  
The radius of a sphere : 10.  
The volume of a sphere is : 4442.
```

Submission

Create a new file named Assignment1_q0123456789.cpp (replace q0123456789 with your student ID number).
Submit to iSpace before deadline.

```
#include <iostream>  
int main()  
{  
std::cout << "--- Task 1 ---\n";  
//FIXME: start task 1 here  
  
std::cout << "--- Task 2 ---\n";  
//FIXME: start task 2 here  
  
std::cout << "--- Task 3 ---\n";  
//FIXME: start task 3 here  
  
}
```