


National University of Computer and Emerging Sciences, Lahore Campus

	Course:	Object Oriented Programming	Course Code:	CS217
	Program:	BS(Computer Science)	Semester:	Spring 2021
	Due Date:	2-Jun-2021	Total Marks:	10
	Section:	2E	Weight (Tentative)	3%
	Evaluation:	Assignment-05	Page(s):	1

Submission Path: [Google classroom](#)

Important Instructions:

- Do not change class definition as provided; however, you can add other required functions.
- Submit only one **RUNNING** file as YourRollNumber.cpp that contains class, its implementation and the driver Program. **Do not submit .rar or .zip files.**

Question-01: Develop a class Hex for representing a Hexadecimal number.

(To read about hexadecimal number and hexadecimal system you can visit the following link

https://www.electronics-tutorials.ws/binary/bin_3.html)

Your task is to implement the following operators:

- + operator to add two Hex numbers such that it supports cascading
- ++ operator to increment a Hex number using **both pre-increment** and **post-increment** versions
- << operator to print a Hex number such that it supports cascading

A partial class definition is given below. You are required to complete it according to the above requirements.

```
class Hex
{
private:
    char* number;
public:
    Hex(char*);
    Hex(Hex&);
    ~Hex();
};
```

Your implementation shall work for arbitrarily large hex numbers. Below is a sample driver program for illustration purpose:

```
Hex a("1F24A0"), b("7E3C");
a++;
++b;
cout << (a + b) << endl;
output: 1FA2DE
```