

C++ Programming Assignment (#04)

Date: Mar. 31, 2016

Instructor: Yoo, Younghwan

Due date: Apr. 6, 2016

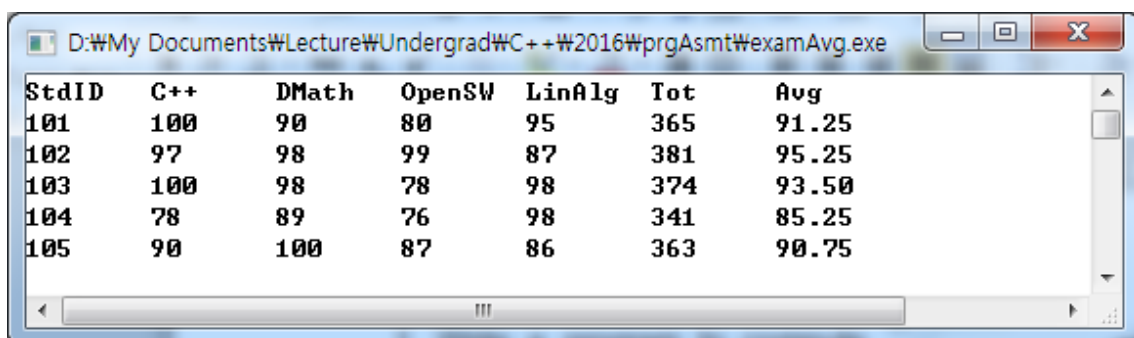
Programming Projects

1. Write a program to compute the total score and the average of examinations. Total five students are taking four courses and their examination scores are as the following table:



Student ID	C++	Discrete Math	Open Source SW	Linear Algebra
101	100	90	80	95
102	97	98	99	87
103	100	98	78	98
104	78	89	76	98
105	90	100	87	86

The scores are stored into a two-dimensional array inside `main()`, and the total score and the average for each student must be computed by separate functions other than `main()`.



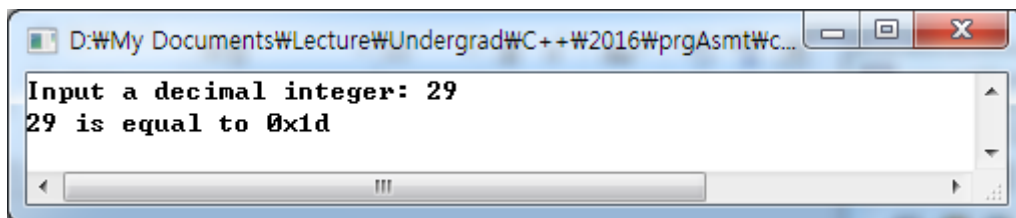
StdID	C++	DMath	OpenSW	LinAlg	Tot	Avg
101	100	90	80	95	365	91.25
102	97	98	99	87	381	95.25
103	100	98	78	98	374	93.50
104	78	89	76	98	341	85.25
105	90	100	87	86	363	90.75

2. Convert decimal integers into hexadecimal numbers. You must not change the output format with `cout.setf()`. Each hexadecimal digit should be stored into an element of an array.

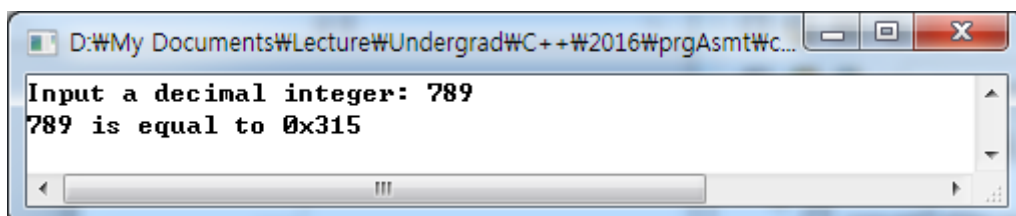
Note: Assume that users input only positive decimal integers.

HEXADECIMAL	DECIMAL	HEXADECIMAL	DECIMAL
1	1	A	10
2	2	B	11
3	3	C	12
4	4	D	13
5	5	E	14
6	6	F	15
7	7		
8	8		
9	9		

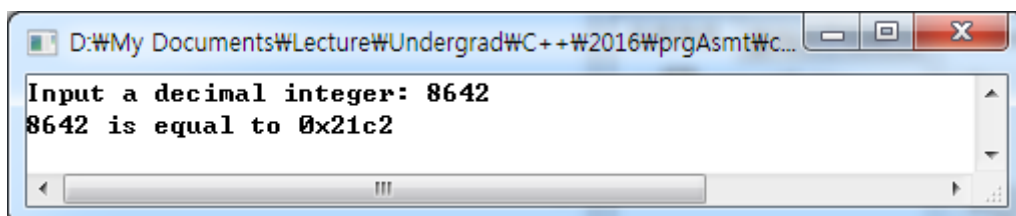
wikiHow



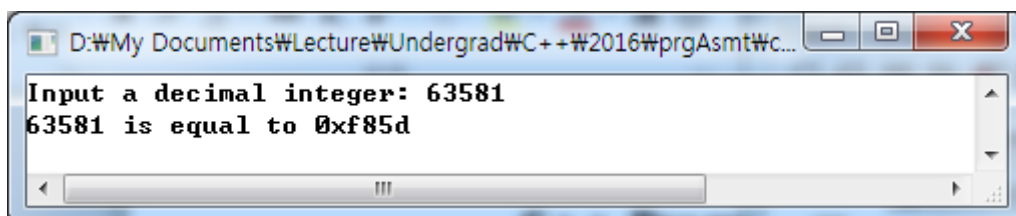
```
D:\My Documents\Lecture\Undergrad\C++\2016\prgAsmt\wc...  
Input a decimal integer: 29  
29 is equal to 0x1d
```



```
D:\My Documents\Lecture\Undergrad\C++\2016\prgAsmt\wc...  
Input a decimal integer: 789  
789 is equal to 0x315
```



```
D:\My Documents\Lecture\Undergrad\C++\2016\prgAsmt\wc...  
Input a decimal integer: 8642  
8642 is equal to 0x21c2
```



```
D:\My Documents\Lecture\Undergrad\C++\2016\prgAsmt\wc...  
Input a decimal integer: 63581  
63581 is equal to 0xf85d
```