

LAB#2 NUMBER SYSTEMS

DUE: WEEK #2

CST8233 W2021



LAB OBJECTIVE

The objective of this lab is to develop a C\C++ program to convert between binary, and decimal representations.

Earning

To earn your mark for this lab, each student should finish the lab's requirements within the lab session and demonstrate the working code to the instructor.

STATEMENT OF THE PROBLEM:

Part 1:

Practice converting between bases by filling in the missing boxes in the following table. Each row should have the same number written three times, once in decimal, once in binary, and once in hexadecimal.

Decimal	Binary	Hexadecimal
212	11010100	
167		A7
		C3D
		1F.C0
	1000101011	
32.75		
	1111101.00100000	

Part 2:

Write a C\C++ program to convert from decimal to binary and from binary to decimal.

First create two functions that perform binary to decimal conversion and back. Then drive a main program to test the above functions.

The best way to test is to run one function and then take the results and run it through the other function. So "11001" should result in 25, and 25 should result in "11001".