HUMBER

CENG 356 Lab Report

Lab: lab 1	
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Date: 1/21/26	

Please refer to the lab manual posted on the blackboard and fill in the blanks in the following table as your lab report.

Notice: All labs are individual work and submission. All academic misconduct behaviors will be penalized to the maximum extent possible according to college policy. Thanks for your attention. (Reference Link: About Academic Misconduct)

Fill in all the ***lab report submission requirements*** in the following table. Please add more rows if necessary.

Requirements	Your submissions (Answers/Source Code/Screenshots/File Submissions, etc.) Please notice: If it is required to submit a separate file, please attach it separately on the blackboard.
Part 2 – Question 1	a. **1 byte =** 8 bits **b. 1M (Use the binary prefix standard) bytes =**1,048,576 bytes (2^{20}) **bytes** c. **1.5 G (Use the binary prefix standard) bytes =** 1.5 × 1,073,741,824 **=** 1,610,612,736 **bytes** **d. 1.8 T (Use the binary prefix standard) bytes** = 1.8 × 1,099,511,627,776 = 1,979,120,930,0 0 0 **bytes** e. **The time period of a 2 GHz clock signal** T=12×109=0.5 ns T = 1/(2 * 10^9)= 0.5 ns T=2×1091=0.5 ns
Part 2 – Question 2	**a. DRAM** – Dynamic Random Access Memory **b. DDR** – Double Data Rate **c. CPU** – Central Processing Unit **d. CMOS** – Complementary Metal-Oxide Semiconductor **e. USB** – Universal Serial Bus
Your source code (in C programming language)	Please submit the source code as a separate .c file.

The running results of your code

Data Type	Your definition example of the corresponding variable in your code (refer to the example in the first row)	Size of the data type running on onlinegdb.com	Size of the data type running on the local PC
char	char ant;	1 bytes	1 bytes
short	short bear ;	2 bytes	2 bytes
int	int cat ;	4 bytes	4 bytes
long	long dog ;	8 bytes	4 bytes
float	float eagle;	4 bytes	4 bytes
double	double fox ;	8 bytes	8 bytes
A pointer to int	int *iguana ;	8 bytes	4 bytes
A pointer to long	long *jaguar;	8 bytes	4 bytes
A pointer to float	float *koala ;	8 bytes	4 bytes
A pointer to double	int *iguana ;	8 bytes	4 bytes
struct Account defined above	monkey;	40 bytes	28 bytes
A pointer to the struct Account	*newt;	8 bytes	4 bytes

Screenshot of the running results of your code