

TECH 3230

Lab #5

Arrays

Ver 0.5

Using the function (hex_dump) provided, you will investigate various variables stored in memory.

Create the following variables and assign them the values as shown below:

```
char a=25;
char b='c';
int c=20;
float d=3.1415;
char e[]={15,20,25,30,35,40,45,50};
char f[]={'t','l','g','e','r','s'};
char g[]={"UofM"};
int h[]={15,20,25,30,35,40,45,50};
float i[]={1.1,2.2,3.3,4.4,5.5,6.6,7.7};
```

use the hex_dump function to display each variable / array and answer the following questions about your output (put into a docx file):

- how many bytes were used to store each value (and full array)?
- What order are the bytes stored in (least significant byte first or last, and for arrays, how does the offset relate to memory locations)?
- For floating point values, use the website <https://www.h-schmidt.net/FloatConverter/IEEE754.html> to show how the value in memory converts into the value. Use screen captures to show in your answer docx.

Submit your C program (copy and paste into notepad or notepad++ and save as a txt file), a copy of your programs output (copy from output window, put into notepad and save as a text file), and the docx file containing your answers.

