Andrew Baca
CS 471 Program 1
August 20, 2018

Program_1.c:

```
/*********************************************************************************************
*
* Andrew Baca
* CS 471
* Programming Assignment 1
*
* August 15th, 2018
*
* Procedure- This program will fill an array of 100 integers,with the ascii values of each letter of
*           my name, and cast the array as a string to be printed out. This program is meant to test the
*           byte sequence of C, with proper NULL termination. We are testing to see if the machine we are
*           using is in a big endian ora little endian sequence.
*
* Input:  An integer array with 100 values, filled with the ascii values in decimal, that would
*         equivelate to my first and last name with proper spacing and indentation.
*
* Output: A string stored in the character pointer address with my first and last name with
*         proper spacing and indentation,stored as little endian.
*
*********************************************************************************************/
#include <stdio.h>

int main(void)
{
        int name[100];                          //declare the array of 100 ingtegers
        char *s;                                //declare a char pointer to store the name in

        name[0] = (65  * 1) + (110 * 256) + (100 * 256 * 256) + (114 * 256 * 256 * 256);        //Store name in ascii value as little endian
        name[1] = (101 * 1) + (119 * 256) + (32  * 256 * 256) + (66  * 256 * 256 * 256);
        name[2] = (97  * 1) + (99  * 256) + (97  * 256 * 256);
        name[3] = 0;            //terminating value

        s = (char*)name;                //cast the name array and store in the address of the char

        printf("My name is %s\n", s);`  //print name

}
```

Note : you store four letters per array space because we are using a 32 bit language, and each char is 8 bits

Makefile:

Activities Text Editor

Open

```
all: program_1.c
	gcc program_1.c -o p1
	./p1
```

Output:

Terminal

File Edit View Search Terminal Help

```
ugrad23/abaca> cd CS471
Directory: /home/ugrad23/abaca/CS471
abaca/CS471> gcc program_1.c -o p1
abaca/CS471> gcc program_1.c -o p1
abaca/CS471> ./p1
My name is Andrew Baca
abaca/CS471> make
gcc program_1.c -o p1
./p1
My name is Andrew Baca
abaca/CS471>
abaca/CS471>
abaca/CS471>
abaca/CS471>
abaca/CS471>
abaca/CS471> make
gcc program_1.c -o p1
./p1
My name is Andrew Baca
abaca/CS471> $$
```