**EE222 Homework 2**

1. (20 pts) What is the output of this program? Explain the results in detail.

#include <stdio.h>

main()

{

int i = 0x1A40A;

short s = i;

char ch = i;

printf("s: %#hx\n", s);

printf("s: %d\n", s);

printf("ch: %c\n", ch);

printf("ch: %d\n", ch);

}

1. (20 pts) Convert decimal number 985 to floating point representation. Show your steps.

1. (20 pts) Given a floating point number 0x89AB0000
2. Rewrite it in binary.
3. Find the corresponding decimal value it represents.

Show your steps.

1. (20 pts) What is the output of this program? Explain the results in detail.

#include <stdio.h>

main()

{

int i = 0xAABBCCDD;

short s = \* (short \*) &i;

printf("i in hex: %#x\ni in decimal: %d\ni as unsigned:%u\n", i,i,i);

printf("s in hex: %#hx\ns in decimal: %hd\ns as unsigned:%hu\n", s,s,s);

}

1. (20 pts) What is the output of this program? Explain the results in detail.

#include <stdio.h>

main()

{

int i = -1066336256;

float f = \* (float\*) &i;

printf("f: %f\n", f);

printf("f: %e\n", f);

}