1. Translate the following decimal number into its binary representation.

1.25	1.01
2.75	
15.5	
13.625	
50.125	

2. Write the value that is returned of the function "int foo()", according to the x86 assembly codes.

```
foo:
        pushq   %rbp
        movq    %rsp, %rbp
        movl    $3, -16(%rbp)
        movl    $4, -12(%rbp)
        movl    $0, -8(%rbp)
        movl    $1, -4(%rbp)
        jmp     .L2
.L3:
        movl    -4(%rbp), %eax
        imull   -16(%rbp), %eax
        movl    %eax, -4(%rbp)
        addl    $1, -8(%rbp)
.L2:
        movl    -8(%rbp), %eax
        cmpl    -12(%rbp), %eax
        jl      .L3
        movl    -4(%rbp), %eax
        leave
        ret
```

Returned value=___

3. Write the byte codes of the following Y86 instructions.

Y86 instructions	Byte codes
rrmovl %ebx,%ecx	
jmp 0xabc	
addl %ebx,%eax	
call 0x1234	
rmmovl %ecx,0x40(%ebx)	
je 0x280	
pushl %eax	

4. We now have a piece of Y86 code, tell the value of %eax when the program ends; and give a description about what the program has done.

```
0x000:
0x000: 308400020000
0x006: 308500020000
0x00c: 7058000000

0x011:
0x011: a058
0x013: 2045
0x015: a008
0x017: a018
0x019: 308102000000
0x01f: 6110
0x021: 7631000000
0x026: 308001000000
0x02c: 7051000000

0x031:
0x031: 8011000000
0x036: a028
0x038: 2002
0x03a: 5005fcffffff
0x040: 308101000000
0x046: 6110
0x048: 8011000000
0x04d: 6020
0x04f: b028
0x051:
0x051: b018
0x053: b058
0x055: b058
0x057: 90
0x058:
0x058: 308007000000
0x05e: 8011000000
0x063: 10

0x200:
0x200:
```

%eax: _____

description: _____