Multiple choice Circle only one letter for the correct answer!

**Question:** What will be the hexadecimal value of AL after these instructions execute?

```
mov al, 94h
xor al, 37h
```

a. B7h  b. A3h  c. 3Fh  d. 7Bh  e. none of the above

**Question:** Which answer choice shows the correct values of the Carry, Zero, and Sign flags after the following instructions execute?

```
mov al, 6
cmp al, 5
```

a. CF = 0, ZF = 0, SF = 0  
b. CF = 1, ZF = 0, SF = 0  
c. CF = 1, ZF = 1, SF = 0  
d. CF = 1, ZF = 0, SF = 1  
e. CF = 1, ZF = 1, SF = 1

**Question:** What will be the hexadecimal values of DX and AX after the following instructions have executed?

```
mov ax, 6B49h
mov dx, 0095h
shr ax, 1
rcl dx, 1
```

a. DX = 0148h, AX = C691h  
b. DX = 012Ah, AX = C9A2h  
c. DX = 012Ah, AX = D692h  
d. DX = 024Bh, AX = D692h  
e. DX = 020Bh, AX = D6A2h

**Question:** What will be the value of ECX when the following sequence of instructions has executed?

```
push 5
push 10
pop ebx
pop eax
pop ecx
```

a. 20  b. 15  c. 10  d. 5  e. cannot be determined

**Short Answer and Short Programming Questions. Write legibly.**

**Question:** What will be the hexadecimal values of EDX, EAX, and the Carry Flag after the following instructions execute? Put your answers in the right box:

```
mov eax, 00371453h
mov ecx, 10000h
mul ecx
```

**Question:** Suppose the following data for this question:

```
data
val1 SDWORD ?
val2 SDWORD ?
```

Implement the pseudocode in the left box using Assembly Language using the appropriate operations which might include: mov, jmp, jg, jng, je, jle or jne operations. Write your code in the right box. Just put down the core of the, not the title nor data etc. So, your code should start with the mov operation and it should be less than 13 lines.

```
if( val1 > val2 || val2 > eax )
    mov ebx, 1;
else
    mov ebx, 2;
```

**Answer:**