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## SELF-TEST

1. When accessing the BIOS services, register \_\_\_\_\_ holds the service number.
2. Which instruction sequence below transfers control to a memory location named A1 if register AL = 40H?

; Sequence 1	; Sequence 2	; Sequence 3
CMP AL, 40H	MOV BL, 40H	CMP AL, 40H
JNZ A1	CMP AL, BL	JA A1
	JZ A1	
3. The ASCII code defines \_\_\_\_\_ different letters, numbers, punctuation marks, and control codes.
4. Determine the contents of register AL after the following instructions have executed:

MOV AL, 58H
AND AL, F0H

5. Determine the contents of register AL after the following instructions have executed:
- ```
MOV AL, E2H
MOV CL, 5
ROR AL, CL
```
6. Determine the contents of register BL after the following instructions have executed:
- ```
MOV BL, 79H
MOV AL, 82H
SUB BL, AL
SBB BL, 13H
```
7. For the instruction sequence below, determine the contents of register AL (a) after the add instruction and (b) after the DAA instruction.
- ```
MOV AL, 46H
ADD AL, 85H
DAA
```
8. When using DOS INT 21, function 0AH (buffered keyboard input), the first byte of the buffer represents:
- (a) the actual length of the buffer
  - (b) the maximum length of the buffer
  - (c) the first character typed from the keyboard

#### Self-Test Answers

1. AH
2. Sequence 2
3. 128
4. 50H
5. 17H
6.  $79 - 82 = F7$  (CF=1)  $-13 = E4$   $-1 = E3$
7. (a) CBH, (b) 31H
8. (b)