

# Revision Lab

**Question1:** Write a program to find whether number stored in AX is positive or negative. If number is Positive then store zero in BX else store one in BX

**Question2:** Declare a word type array of 6 element then write a program to count negative numbers in array and store count in memory.

**Question3:** Declare a word type array of 6 element then write a program to count zeros in array and store count in memory.

**Question4:** Declare a word type array of 6 element then write a program that find odd and Even elements in array. And Store count of even and odd numbers in memory.

**Question5:** Write a Assembly code to perform multiplication (As discussed the method in previous class). You have to store multiplicand in BI and multiplier in Bh, and at the end store the result in dd memory variable.

## Question. 6

Write an assembly language program that sets bit at 6<sup>th</sup> position of input binary representation. For example:

Binary representation: 0111 1000 0100 0110 Input: dw 0x7846 Out: dw 0x7866
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## Question. 7

Write an assembly language program that resets bit at 6<sup>th</sup> position of input binary representation. For example:

Input binary representation: 0111 1000 0110 0110 Input: dw 0x7866 Out: db 0x7846
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### **Question. 8**

Write an assembly language program that set or resets bit according to any arbitrary position stored in variable position. For example:

Example #1:  
Input binary representation: 0111 1000 0100 0110  
Input: dw 0x7846  
Out: dw 0x7866  
Position: db 6

Example #2:  
Binary representation: 0111 1000 0110 0110  
Input: db 0x7866  
Out: db 0x7846  
Position: db 6

### **Question. 9**

Write an assembly language program that find and count occurrences of 10 pattern in binary representation of input.

**Note:** start checking from Left

For-example  
Input binary representation: 0111 1000 0110 0110  
Input: dw 0x7866  
Count: dB

### **Question. 10**

Write an assembly language program that find and replace occurrences of 10 patterns in binary representation of input with 01.

**Note:** start checking from Left

For-example  
Binary representation: 0111 1000 0110 0110  
Input: dw 0x7866  
Output: dw 0x7455

