

**BIM303 MICROCOMPUTERS
LAB EXPERIMENT #3**

Objective(s) • Become familiar with using arithmetic operations, procedures and program control instructions in 8086 emulator software.

Lab Work Write an assembly code that determines if a pre-defined number can be divided by 2, 3, 5 or 10. You can define the number as a variable in the code (e.g. "k db 15"). Your program must follow the steps below:

1. You must define a number.
2. Check if the number can be divided by 2, 3, 5 or 10.
3. If the number can be divided any of the numbers mentioned above, it must print a message that includes the divisor number.
(You must define a procedure for printing)
4. If the number can be divided none of the numbers mentioned above, the program must exit without printing anything.

EXAMPLE: If the defined number is 15, then the output must be as:



```
emulator screen (80x25 chars)
The number can be divided by 3
The number can be divided by 5
```

Hint: You can use the following sample code block to write a message.

```
                LEA SI, MESSAGE2
                MOV CX, 32
                MOV AH, 0Eh
GO:             LODSB
                INT 10h
                LOOP GO
...
MESSAGE2 DB 'The number can be divided by 2',13, 10
```

Evaluation: You must complete your work until lab hour. You will be evaluated on the lab session.