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Section SE3-1
LAB #6

Task 1

```
.model small
.stack 100h
.data

msg_even db 'The number is EVEN.$'

msg_odd db 'The number is ODD.$'

input db?

.code

main:

mov ax, @data

mov ds, ax

mov ah, 1

int 21h
```

sub al, 30h

```
mov input, al
 ; Check if even or odd
 mov al, input
 and al, 1
   jz EVEN
ODD:
 mov ah, 9
 lea dx, msg_odd
 int 21h
 jmp EXIT
EVEN:
 mov ah, 9
 lea dx, msg_even
  int 21h
EXIT:
 mov ah, 4ch
  int 21h
end main
```



Task 2

```
.model small
.stack 100h
.data
fib db 5 dup(?)
newline db 13, 10, '$'
.code
main:
mov ax, @data
```

```
mov ds, ax
  mov al, 0
  mov [fib], al
  mov al, 1
  mov [fib+1], al
  mov cx, 3
  mov si, offset fib
  add si, 1
fibo_loop:
  mov al, [si]
  mov bl, [si-1]
  add al, bl
  mov [si+1], al
  inc si
  loop fibo_loop
```

```
lea si, fib
  mov cx, 5
print_loop:
  mov al, [si]
  add al, 30h
  mov dl, al
  mov ah, 02h
  int 21h
  mov dl, 13
  mov ah, 02h
  int 21h
  mov dl, 10
  mov ah, 02h
  int 21h
  inc si
  loop print_loop
```

mov ah, 4Ch

int 21h

end main

