

Lab 17

## Task1:

```

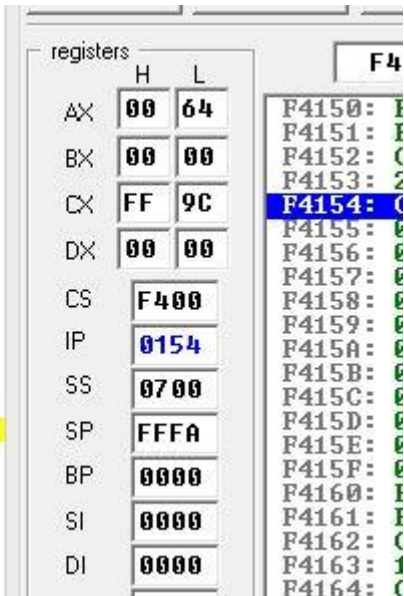
org 100h

counter dw ?
mov ax,0
mov cx,65535

max:
add ax,10
inc counter
cmp ax,1000
jz full
loopnz max

full:
mov ax,counter
ret

```



## Task 2:

```

org 100h

array dw 2,8,6,7,4,2

mov si,0

program:
mov ax,array[si]
mov bx,array[si]
inc si
sub bx,7
loopnz program

ret

```



### Task 3:

; You may use ; The location		registers	
		H	L
org 100h		AX	01 00
mov cx, 65535		BX	00 00
mov ax, 1		CX	FF 00
Last:		DX	00 00
inc ax		CS	F400
sub ah, 00		IP	0154
Loopz Last		SS	0700
ret		SP	FFFA
		BP	0000
		SI	0000
		DI	0000

### Task 4:

The screenshot shows the assembly window with the following code:

```

org 100h

mov cx, 65535
mov ax, 1
mov bx, 2

Last:
mul bx
cmp dx, 00

Loopz Last

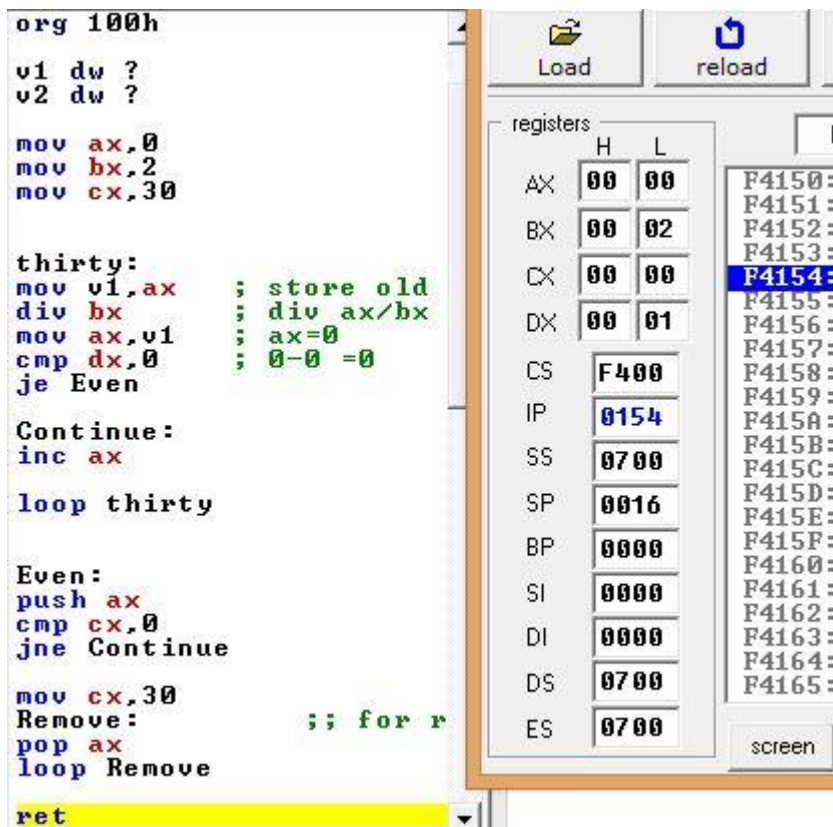
ret
  
```

The register window on the right shows the following values:

AX	80	00
BX	00	02
CX	FF	F0
DX	00	00
CS	07	00
IP	01	09
SS	07	00
SP	FF	FE
BP	00	00
SI	00	00

## Lab 20

### Task 1 & 2:



The screenshot shows an assembly editor with the following code and register window:

```
org 100h
v1 dw ?
v2 dw ?

mov ax,0
mov bx,2
mov cx,30

thirty:
mov v1,ax      ; store old
div bx         ; div ax/bx
mov ax,v1      ; ax=0
cmp dx,0       ; 0-0 =0
je Even

Continue:
inc ax

loop thirty

Even:
push ax
cmp cx,0
jne Continue

mov cx,30      ;; for r
Remove:
pop ax
loop Remove

ret
```

The register window shows the following values:

registers	H	L
AX	00	00
BX	00	02
CX	00	00
DX	00	01
CS	F400	
IP	0154	
SS	0700	
SP	0016	
BP	0000	
SI	0000	
DI	0000	
DS	0700	
ES	0700	

The memory window on the right shows addresses from F4150 to F4165. Address F4154 is highlighted.