

برنامهای که هر دفعه یک بار، بوقت کامپیوتر را پردازش می‌کند.

```
CODESG SEGMENT 'CODE'
ASSUME CS:CODESG
ORG 100H
BEGIN: JMP MAIN
;-----
```

```
OLDINT8 DD ?
COUNT DW 90
;-----
```

```
.286C
NEWISR PROC NEAR
```

```
PUSHA
PUSHF
```

```
;////////// My Code //////
DEC CS:COUNT
JNZ EXIT
MOV CS:COUNT,90
MOV AH,0EH
MOV AL,7
INT 10H
;//////////
```

```
EXIT:
POPF
POPA
```

```
JMP CS:OLDINT8
NEWISR ENDP
```

```
MAIN PROC NEAR
```

```
MOV AH,35H
MOV AL,08H
INT 21H
MOV WORD PTR OLDINT8,BX
MOV WORD PTR OLDINT8+2,ES
```

```
MOV AH,25H
MOV AL,08H
MOV DX,OFFSET NEWISR
INT 21H
```

```
MOV AH,31H
MOV DX,(OFFSET MAIN - OFFSET
NEWISR)
INT 21H
```

```
MAIN ENDP
CODESG ENDS
END BEGIN
```

برنامهای که دلخواه JR را دائمی بالای نمایش دهد

```
CODESG SEGMENT 'CODE'
ASSUME CS:CODESG
ORG 100H
BEGIN: JMP MAIN
;-----
```

```
OLDINT8 DD ?
ROW DB ?
COL DB ?
;-----
```

```
.286C
NEWISR PROC NEAR
```

```
PUSHA
PUSHF
;////////// My Code //////
MOV AH,03H
```

```
MOV BH,0
INT 10H
MOV CS:ROW,DH
MOV CS:COL,DL
```

```
MOV AH,02H
MOV BH,0
MOV DH,0
MOV DL,38
INT 10H
```

```
MOV AH,09H
MOV BH,0
MOV BL,11001110B
MOV CX,1
MOV AL,'J'
INT 10H
```

```
MOV AH,02H
MOV BH,0
MOV DH,0
MOV DL,39
INT 10H
```

```
MOV AH,09H
MOV BH,0
MOV BL,11001110B
MOV CX,1
MOV AL,'R'
INT 10H
```

```
MOV AH,02H
MOV BH,0
MOV DH,CS:ROW
MOV DL,CS:COL
INT 10H
;//////////
```

```
POPF
POPA
JMP CS:OLDINT8
NEWISR ENDP
```

```
MAIN PROC NEAR
```

```
MOV AH,35H
MOV AL,08H
INT 21H
MOV WORD PTR OLDINT8,BX
MOV WORD PTR OLDINT8+2,ES
```

```
MOV AH,25H
MOV AL,08H
MOV DX,OFFSET NEWISR
INT 21H
```

```
MOV AH,31H
MOV DX,(OFFSET MAIN - OFFSET
NEWISR)
INT 21H
MAIN ENDP
CODESG ENDS
END BEGIN
```

برنامهای که با فشردن کلید Alt+F10 بوقت کامپیوتر را پردازش می‌کند.

```
CODESG SEGMENT 'CODE'
ASSUME CS:CODESG
ORG 100H
BEGIN: JMP MAIN
;-----
```

```
OLDINT9 DD ?
;-----
```

```
NEWISR PROC NEAR
```

```
PUSH AX
PUSHF
```

```
;////////// My Code //////
MOV AH,02H
```

```
INT 16H
TEST AL,00001000B ;Test for Alt
JZ EXIT
```

```
IN AL,60H ;Get scan code
CMP AL,44H ;Is F10 Pressed?
JNE EXIT
```

```
MOV AH,0EH ;Beep
```

```
MOV AL,7
INT 10H
;//////////
```

```
EXIT:
POPF
POP AX
```

```
;Execute Original ISR
JMP CS:OLDINT9
NEWISR ENDP
```

```
MAIN PROC NEAR
```

```
MOV AH,35H
MOV AL,09H
INT 21H
```

```
;Save address of original ISR
MOV WORD PTR OLDINT9,BX
MOV WORD PTR OLDINT9+2,ES
```

```
;Set new address for ISR
```

```
MOV AH,25H
MOV AL,09H
MOV DX,OFFSET NEWISR
INT 21H
```

```
;Make NEWISR resident in memory
```

```
MOV AH,31H
MOV DX,(OFFSET MAIN - OFFSET
NEWISR)
INT 21H
```

```
MAIN ENDP
CODESG ENDS
END BEGIN
```

نمونه‌هایی از برنامه‌های

مقید در حافظه (TSR)

(جواد راستی - درس زبان اsemblر و برنامه‌سازی سیستم)