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Coal lab 4

Registers

EAX = 00000000 EBX = 00B51000 ECX = 00EA1005 EDX = 00EA1005
ESI = 00EA1005 EDI = 00EA1005 EIP = 00EA1026 ESP = 00D5FEBC
EBP = 00D5FEC8 EFL = 00000246

194 %

program.asm

```
1      INCLUDE Irvine32.inc
2      .data
3          num1 db 25
4          num2 dw 1200h
5          num3 dd ?
6
7      .code
8      main PROC
9          mov al , num1
10         mov ax , num2
11
12         movzx eax, al
13         mov num3 , eax
14
15         movzx eax, ax
16         mov num3 , eax
17
18         exit
19     main ENDP
20     END main
21
```

Diagnostic Tools

Diagnostics session: 0 seconds

Events

CPU (% of all processors)

Process Memory

100

0

100

0

Summary Events Memory

Events

Show Events (1 of 1)

Memory Usage

Take Snapshot

Enable heap profiling

CPU Usage

Record CPU Profile

```
INCLUDE Irvine32.inc
.data
    result BYTE ?

.code
main PROC
    COUNT = 5
    LIMIT EQU 10
    mov ax , COUNT
    add ax , LIMITS
    inc ax
    mov result , ax

    exit
main ENDP
END main
```

```
INCLUDE Irvine32.inc
```

```
.data
```

```
    valA SBYTE -15
```

```
    valB BYTE 25
```

```
    valC WORD ?
```

```
.code
```

```
main PROC
```

```
    movsx eax , valA
```

```
    movsx ebx , valB
```

```
    add eax , ebx
```

```
    sub eax , 5
```

```
    mov valC , eax
```

```
    exit
```

```
main ENDP
```

```
END main
```

```
INCLUDE Irvine32.inc
```

```
.data
```

```
    x db 12h
```

```
    y db 14h
```

```
    z db 5h
```

```
    w db 10h
```

```
    finalresult dw ?
```

```
.code
```

```
main PROC
```

```
    mov edx , 0
```

```
    add dl , x
```

```
    add dl , y
```

```
    sub dl , z
```

```
    sub dl , w
```

```
    mov finalresult , dl
```

```
    exit
```

```
main ENDP
```

```
END main
```

```
INCLUDE Irvine32.inc
```

```
.data
```

```
    num1 dw 1234h
```

```
    num2 dw 5678h
```

```
.code
```

```
main PROC
```

```
    mov ax , num1
```

```
    mov bx , num2
```

```
    xchg ax ,bx
```

```
    mov num1 , ax
```

```
    mov num2 , bx
```

```
    exit
```

```
main ENDP
```

```
END main
```