COAL LAB TASK 3 (HOME)
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TASK 1:

Code:

```
TITLE "24K-0656 Adnan"
INCLUDE Irvine32.inc

.data
    a DWORD 10h
    b DWORD 12h
    c DWORD 20h
    d DWORD 25h

.code
main PROC

    mov EAX, [a]
    add EAX, [b]

    sub EAX, [a]
    add EAX, [b]

    add EAX, [c]

    add EAX, [d]

    xchg EAX, EBX

    exit
main ENDP
END main
```

TASK 2:
Code:

```
TITLE "24K-0656 Adnan"
INCLUDE Irvine32.inc

.data
    bArray BYTE 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
```

TASK 3:
Code:

```
TITLE "24K-0656 Adnan"
INCLUDE Irvine32.inc


.data
    svar BYTE 200 DUP("NUCES")
```

TASK 4:
Code:

```
TITLE "24K-0656 Adnan"
INCLUDE Irvine32.inc


.data
    dArray DWORD 30 DUP(?)
```

TASK 5:
Code:

```
TITLE "24K-0656 Adnan"
INCLUDE Irvine32.inc


.data
    var WORD 10000,20000,30000
```

TASK 6:
Code:

```
TITLE "24K-0656 Adnan"
INCLUDE Irvine32.inc


.data
    marks WORD 5 DUP(3 DUP(?))
```

TASK 7:
Code:

```
TITLE "24K-0656 Adnan"
INCLUDE Irvine32.inc


.data
  dailySales SDWORD 2500, 10000, 45000, 12000, 15000, 45000, 7000
```

TASK 8:
Code:

```
TITLE "24K-0656 Adnan"
INCLUDE Irvine32.inc


.data
  num1 DWORD 1000h
  num2 DWORD 2000h
```

TASK 9:
Code:

```
TITLE "24K-0656 Adnan"
INCLUDE Irvine32.inc


.data
   uArray WORD 20 DUP(5)
```
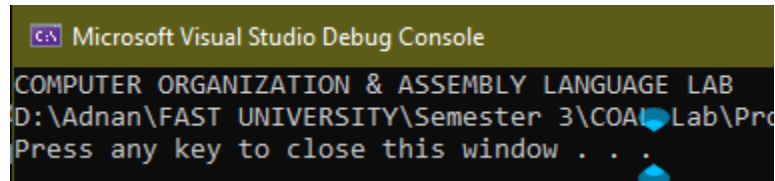
TASK 10:

Code:

```
TITLE "24K-0656 Adnan"
INCLUDE Irvine32.inc

.data
    msg BYTE "COMPUTER ORGANIZATION & ASSEMBLY LANGUAGE LAB", 0

.code
main PROC
    mov EDX, OFFSET msg
    call WriteString

    exit
main ENDP
END main
```

Output:

```
Microsoft Visual Studio Debug Console

COMPUTER ORGANIZATION & ASSEMBLY LANGUAGE LAB
D:\Adnan\FAST UNIVERSITY\Semester 3\COAL Lab\Pro
Press any key to close this window . . .
```