```
TITLE Chapter 3 Exercise 2                    (ch03_02.asm)

Comment !
Description: Write a program that contains a definition
of each data type listed in Section 3.4. Initialize each
variable to a value that is consistent with its data type.

** For best appearance, set your editor's Tab indent size to 5 **
!

INCLUDE Irvine32.inc
.data
var1 BYTE 10h
var2 SBYTE -14
var3 WORD 2000h
var4 SWORD +2345
var5 DWORD 12345678h
var6 SDWORD -2342423
var7 FWORD 0
var8 QWORD 1234567812345678h
var9 TBYTE 1000000000123456789Ah
var10 REAL4 -1.25
var11 REAL8 3.2E+100
var12 REAL10 -6.223424E-2343

.code
main PROC

     exit
main ENDP
END main
```

```
TITLE Chapter 3 Exercise 3                    (ch03_03.asm)

Comment !
Description: Write a program that defines symbolic constants
for all of the days of the week. Create an array variable
that uses the symbols as initializers.

** For best appearance, set your editor's Tab indent size to 5 **
!

INCLUDE Irvine32.inc

Sunday    = 0
Monday    = 1
Tuesday   = 2
Wednesday = 3
Thursday  = 4
Friday    = 5
Saturday  = 6

.data
myDays BYTE Sunday, Monday, Tuesday, Wednesday,
           Thursday, Friday, Saturday

.code
main PROC

     exit
main ENDP
END main
```

```
TITLE Chapter 4 Exercise 4                    (ch04_04.asm)

Comment !
Description: Write a program that defines symbolic names
for several string literals (characters between quotes).
Use each symbolic name in a variable definition.

** For best appearance, set your editor's Tab indent size to 5 **
!

INCLUDE Irvine32.inc

sym1 TEXTEQU <"System failure">
sym2 TEXTEQU <"Press any key to continue...">
sym3 TEXTEQU <"Insufficient user training">
sym4 TEXTEQU <"Please re-start the system">

.data
msg1 BYTE sym1
msg2 BYTE sym2
msg3 BYTE sym3
msg4 BYTE   sym4

.code
main PROC


      exit
main ENDP
END main
```

```
TITLE   Chapter 3 Exercise 1                  (ch03_01.asm)

Comment !
Description: Using the AddSub program from Section 3.2 as a
reference, write a program that subtracts three 16-bit
integers using only registers. Insert a call DumpRegs
statement to display the register values.

** For best appearance, set your editor's Tab indent size to 5 **
!

INCLUDE Irvine32.inc
.code
main PROC

     mov   ax,4000h
     mov   bx,1000h
     mov   cx,1500h

     sub   ax,bx
     sub   ax,cx
     call DumpRegs

     exit
main ENDP
END main
```