

```
#####  
Script started on Wed Sep 20 16:49:18 2000  
#####  
sgi1 1> cat Makefile
```

```
.IGNORE:  
  
F77_COMPILE = $(F77) $(F77FLAGS) $(F77CFLAGS)  
F77_LOAD     = $(F77) $(F77FLAGS) $(F77LFLAGS)
```

```
.f.o:  
    $(F77_COMPILE) $*.f
```

```
EXECUTABLES = fdemo1
```

```
all: $(EXECUTABLES)
```

```
fdemo1: fdemo1.o  
    $(F77_LOAD) fdemo1.o -o fdemo1
```

```
clean:  
    rm *.o  
    rm $(EXECUTABLES)
```

```
#####  
sgi1 2> env | grep F77
```

```
F77=f77  
F77PP=touch  
F77FLAGS=-g -64  
F77CFLAGS=-c  
F77LFLAGS=-L/usr/local/lib
```

```
#####  
sgi1 3> make
```

```
f77 -g -64 -c fdemo1.f  
f77 -g -64 -L/usr/local/lib fdemo1.o -o fdemo1
```

```
#####  
# I encourage you to download 'fdemo1.f', compile it,  
# and run it INTERACTIVELY yourself. You should see  
# output essentially identical to that shown below.  
# Note, however, that both because I'm lazy, as well  
# as to illustrate the use of I/O re-direction, I have  
# previously prepared a file called 'INPUT', which  
# contains many lines consisting of a single character  
# These lines will be read by the 'prompt' subroutine  
# which, when run interactively, writes a prompt to  
# stdout and then waits for input from stdin.
```

```
#####  
sgi1 4> head -10 INPUT
```

```
q  
q  
q  
q  
q  
q  
q  
q  
q  
q
```

```
sgi1 5> fdemo1 < INPUT
```

```
a = 2.5000000000000001E-02 b = -1.2339999999999999E-16  
c = 1.0000000000000000 i = 3000 switch = T
```

```
Through scalar assignment
```

```
#####  
# Note: For readability, all other instances of the  
# following output from the 'prompting' routine have been  
# converted to blank lines with a text editor command.  
#####
```

```
res1 = 5.0000000000000000 res2 = 13.0000000000000000  
res3 = 3.605551275463989
```

```
Through real*8 arithmetic expressions
```

```
ires1 = 5 ires2 = 0  
ires3 = 512 ires4 = 64
```

```
Through integer arithmetic expressions
```

```
res1 = 5.0000000000000000 res2 = 0.0000000000000000E+00  
res3 = 0.7500000000000000
```

```
Through mixed-mode arithmetic
```

```
Loop 1: i = 1  
Loop 1: i = 2  
Loop 1: i = 3
```

```
Through loop 1
```

```
Loop 2: i = 1  
Loop 2: i = 2  
Loop 2: i = 3
```

```
Through loop 2
```

```
Loop 3: i = 1
```

Loop 3: i = 3  
Loop 3: i = 5  
Loop 3: i = 7  
Through loop 3

Loop 4: i = 3  
Loop 4: i = 2  
Loop 4: i = 1  
Through loop 4

Loop 5: i, j = 1 1  
Loop 5: i, j = 1 2  
Loop 5: i, j = 2 1  
Loop 5: i, j = 2 2  
Loop 5: i, j = 3 1  
Loop 5: i, j = 3 2  
Through loop 5

Loop 6: i = 2  
Loop 6: i = 4  
Loop 6: i = 6  
Through loop 6

lres1 = T lres2 = T lres3 = F  
Through basic conditionals

25.000000000000000 > 12.000000000000000  
Through if 1

25.000000000000000 > 12.000000000000000  
Through if 2

25.000000000000000 > 24.000000000000000  
Through nested if

Case 1  
Case 2  
Case 3  
Default case  
Through case via if

Do while loop: b = 0.0000000000000000E+00  
Do while loop: b = 0.1000000000000000  
Do while loop: b = 0.2000000000000000  
Do while loop: b = 0.3000000000000000  
Do while loop: b = 0.4000000000000000  
Do while loop: b = 0.5000000000000000  
Do while loop: b = 0.6000000000000000  
Do while loop: b = 0.7000000000000000  
Do while loop: b = 0.7999999999999999  
Do while loop: b = 0.8999999999999999  
Do while loop: b = 0.9999999999999999  
Through while loop

res1 = 0.8090169943749473      res2 = 0.5877852522924732  
res3 = 1.0000000000000000      res4 = 1.0000000000000000  
Through built-in fcn 1

res1 = 0.7853981633974483  
Through built-in fcn 2

min(3.0d0,2.0d0) = 2.0000000000000000  
min(1,-3,5,0) = -3  
Through built-in fcn 3

i = 0  
i = 100  
i = 200

```
i =      300
i =      400
i =      500
i =      600
i =      700
i =      800
i =      900
i =     1000
```

Through built-in fcn 4

Through fdemo1

```
sgil 6> exit
exit
```

script done on Wed Sep 20 16:49:38 2000