```
############################################################
Script started on Sun Aug 23 16:32:23 1998
############################################################
newton 21> more Makefile
.IGNORE:

F77       = f77
F77FLAGS  = -g -n32
F77CFLAGS = -c
F77LFLAGS = -L/usr/localn32/lib -n32

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)


############################################################
newton 22> make
        make -f Makefile
        f77 -g -n32 -c fdemo1.f
        f77 -g -n32 -L/usr/localn32/lib -n32 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.
#############################################################
newton 23> head -10 INPUT
q
q
q
q
q
q
q
q
q
q
```

```
newton 24> fdemo1 < INPUT
 a =   2.5000000000000001E-02 b =  -1.2339999999999999E-16
  c =    1.000000000000000     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.
############################################################
 Enter any non-blank character & enter to continue
 res1 =    5.000000000000000     res2 =    13.00000000000000
  res3 =    3.605551275463989
 Through real*8 arithmetic expressions

 ires1 =            5 ires2 =            0
 ires3 =          512 ires4 =           64
 Through integer arithmetic expressions

 res1 =    5.000000000000000     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

   25.00000000000000     >    12.00000000000000
Through if 1

   25.00000000000000     >    12.00000000000000
Through if 2

   25.00000000000000     >    24.00000000000000
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 =    1.000000000000000     res4 =    1.000000000000000
Through built-in fcn 1

res1 =   0.7853981633974483
Through built-in fcn 2

min(3.0d0,2.0d0) =    2.000000000000000
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

newton 25> exit
newton 26>
script done on Sun Aug 23 16:33:26 1998
```