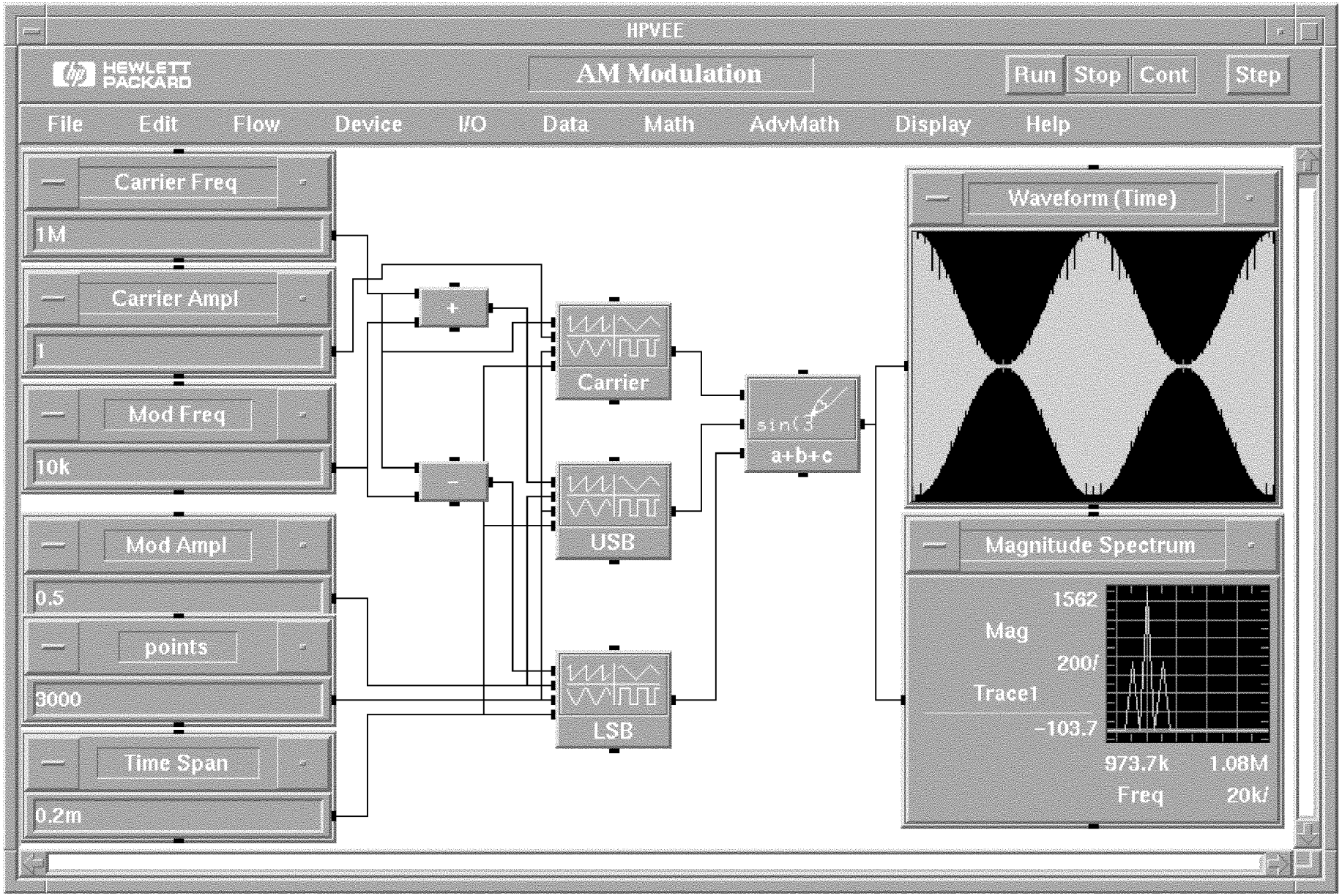
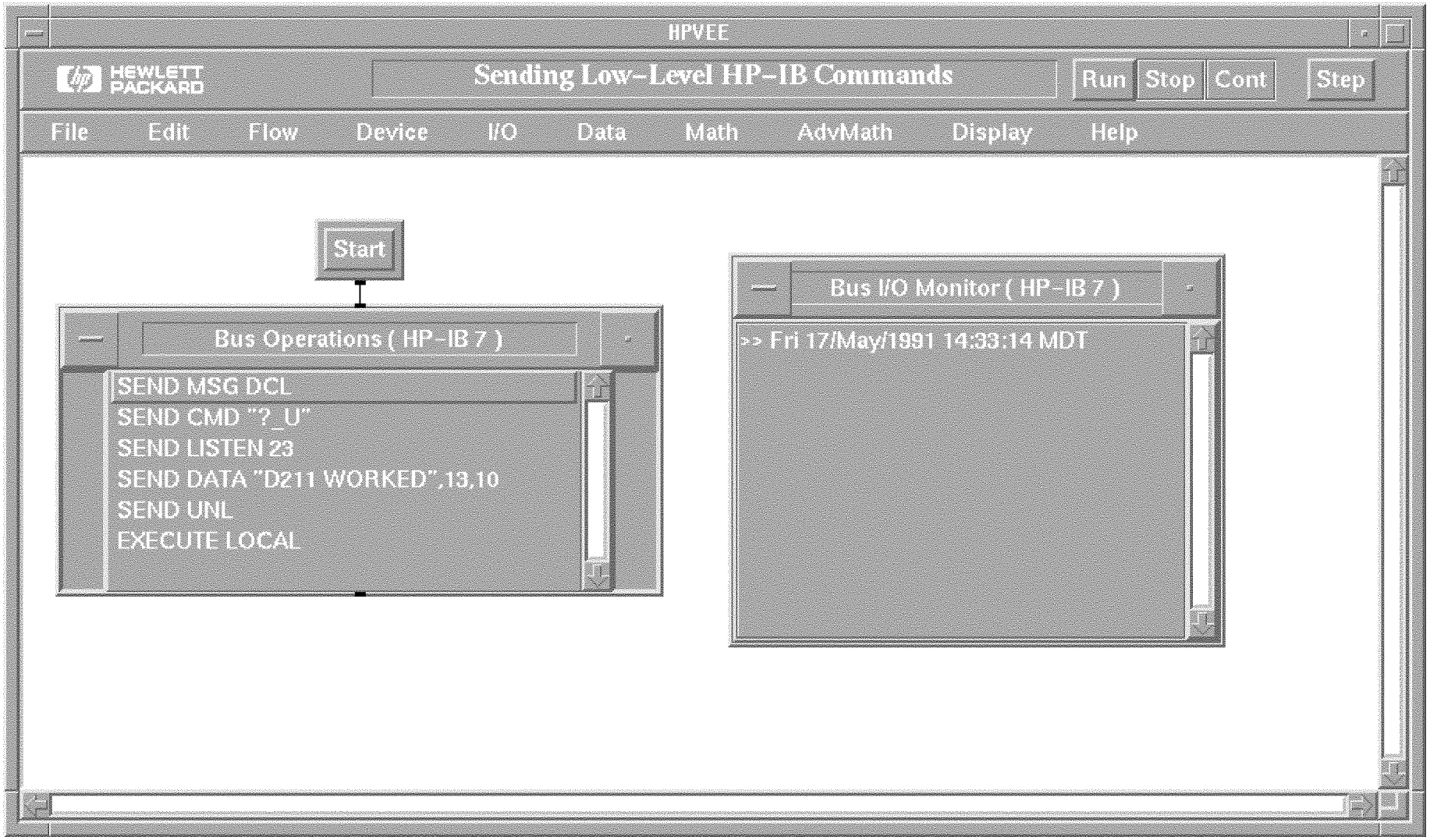
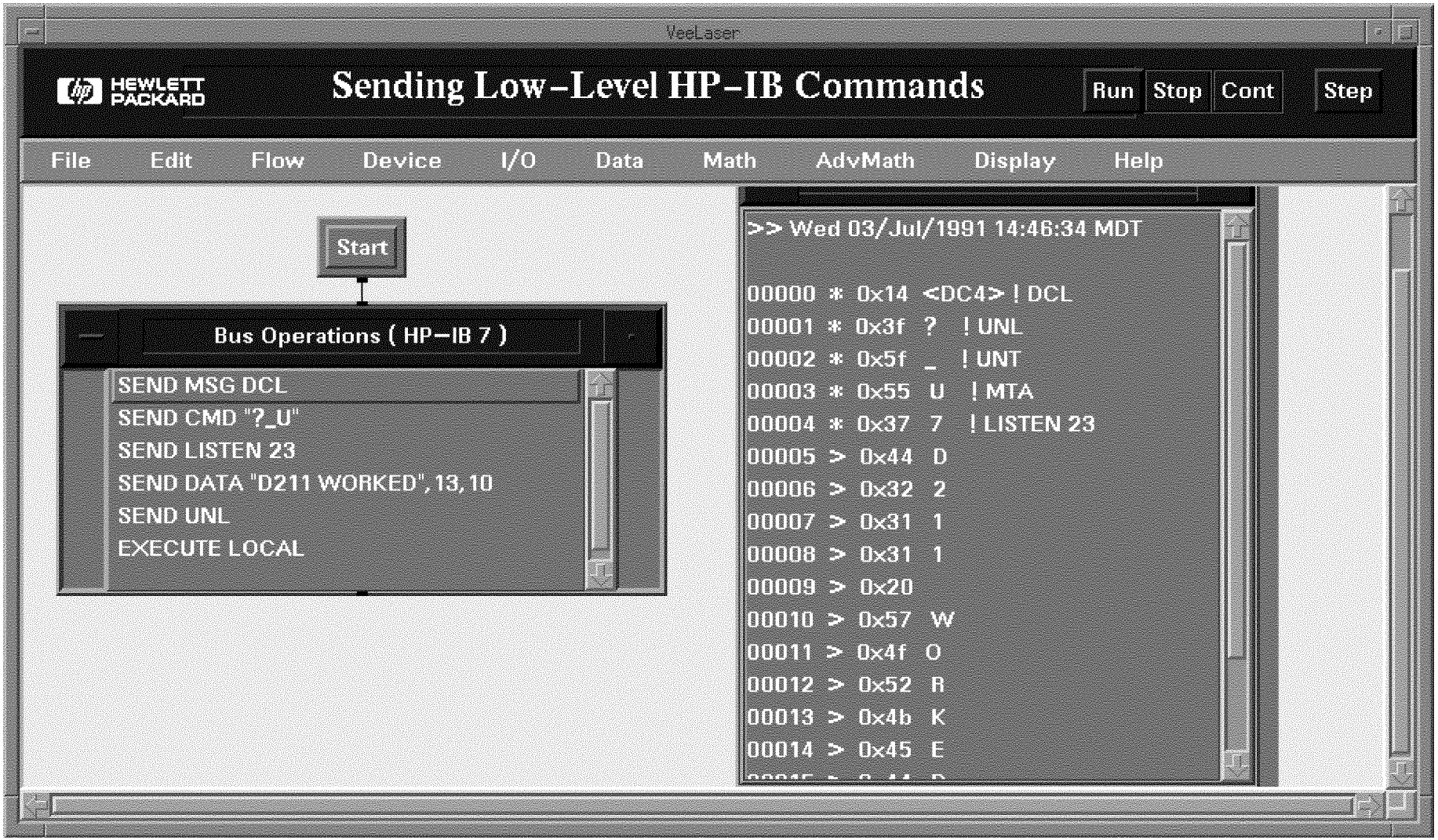
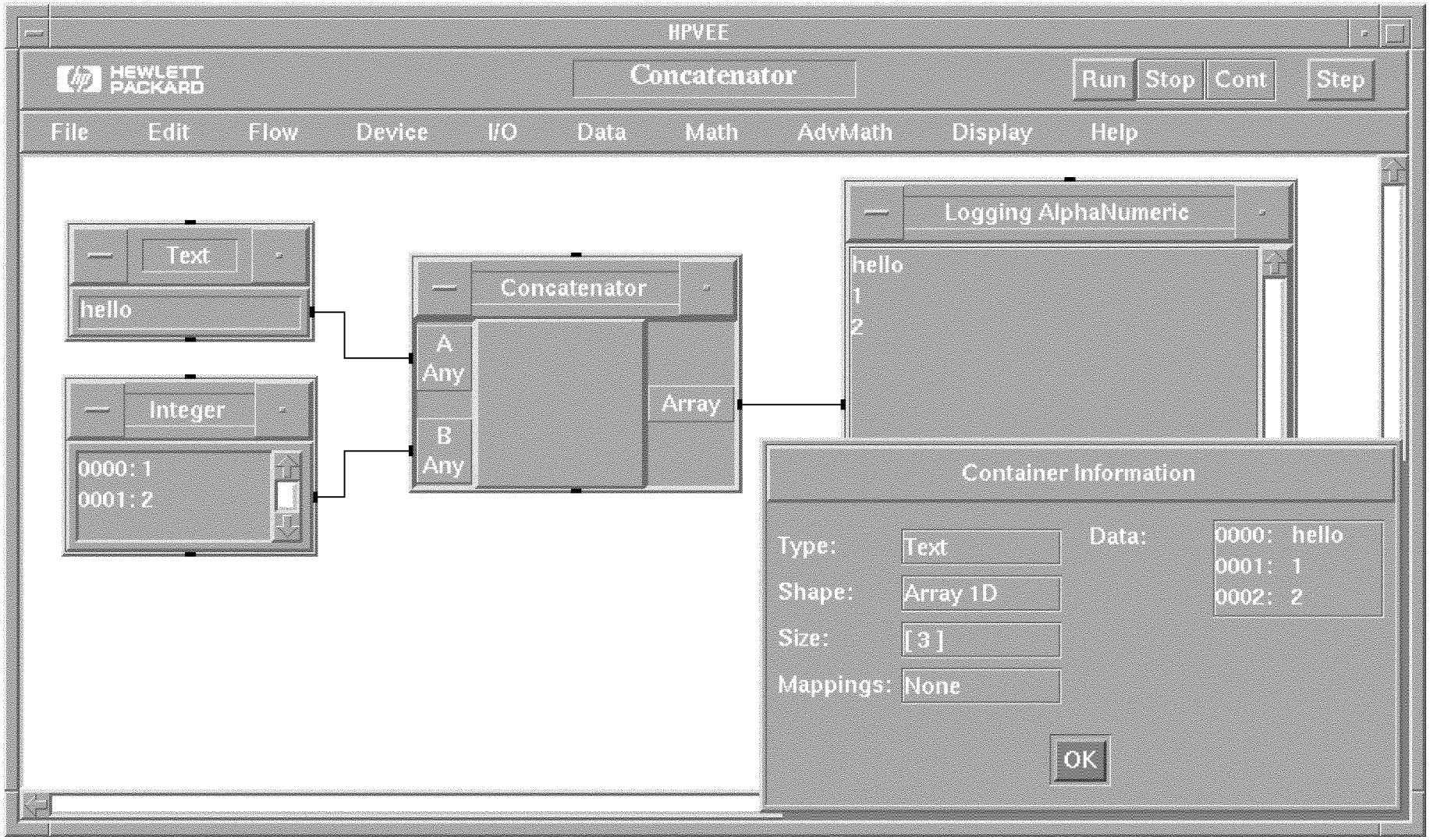
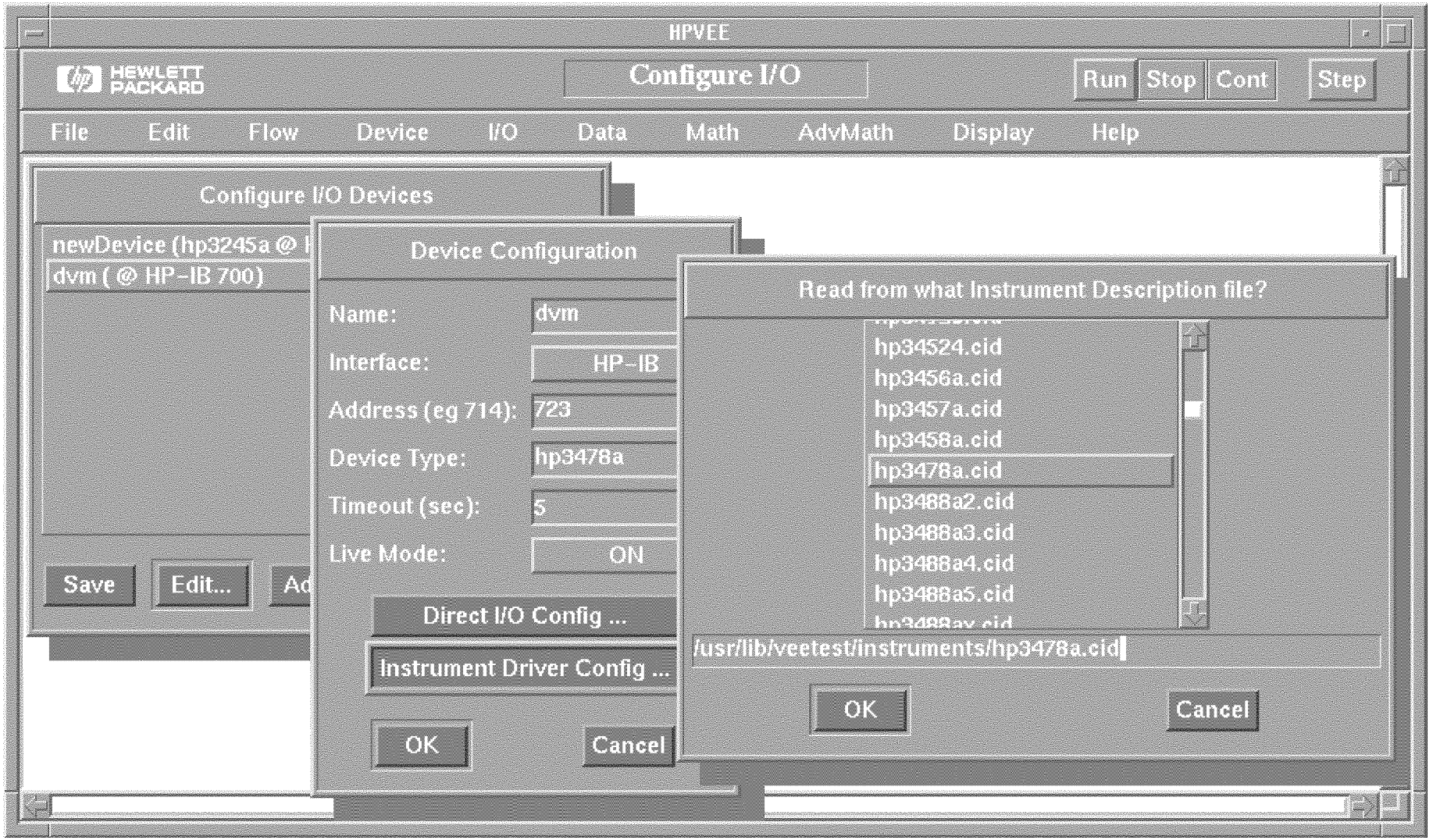
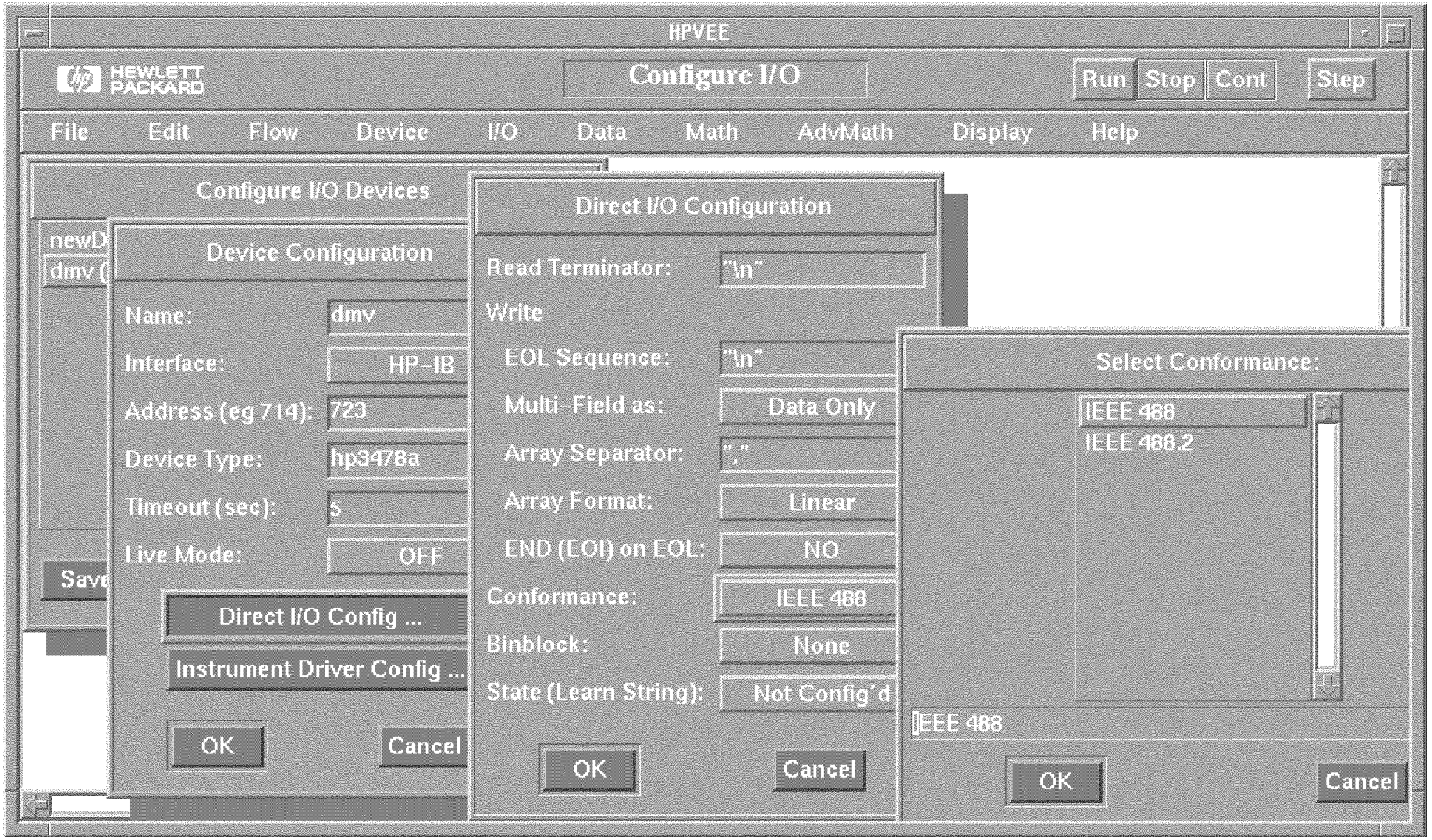

HPVEE
HEWLETT PACKARD
AM Modulation
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Carrier Freq
1M
Carrier Ampl
1
Mod Freq
10k
Mod Ampl
0.5
points
3000
Time Span
0.2m
+
−
Carrier
USB
LSB
a+b+c
Waveform (Time)
Magnitude Spectrum
1562
Mag
200/
Trace1
−103.7
973.7k
1.08M
Freq
20k/

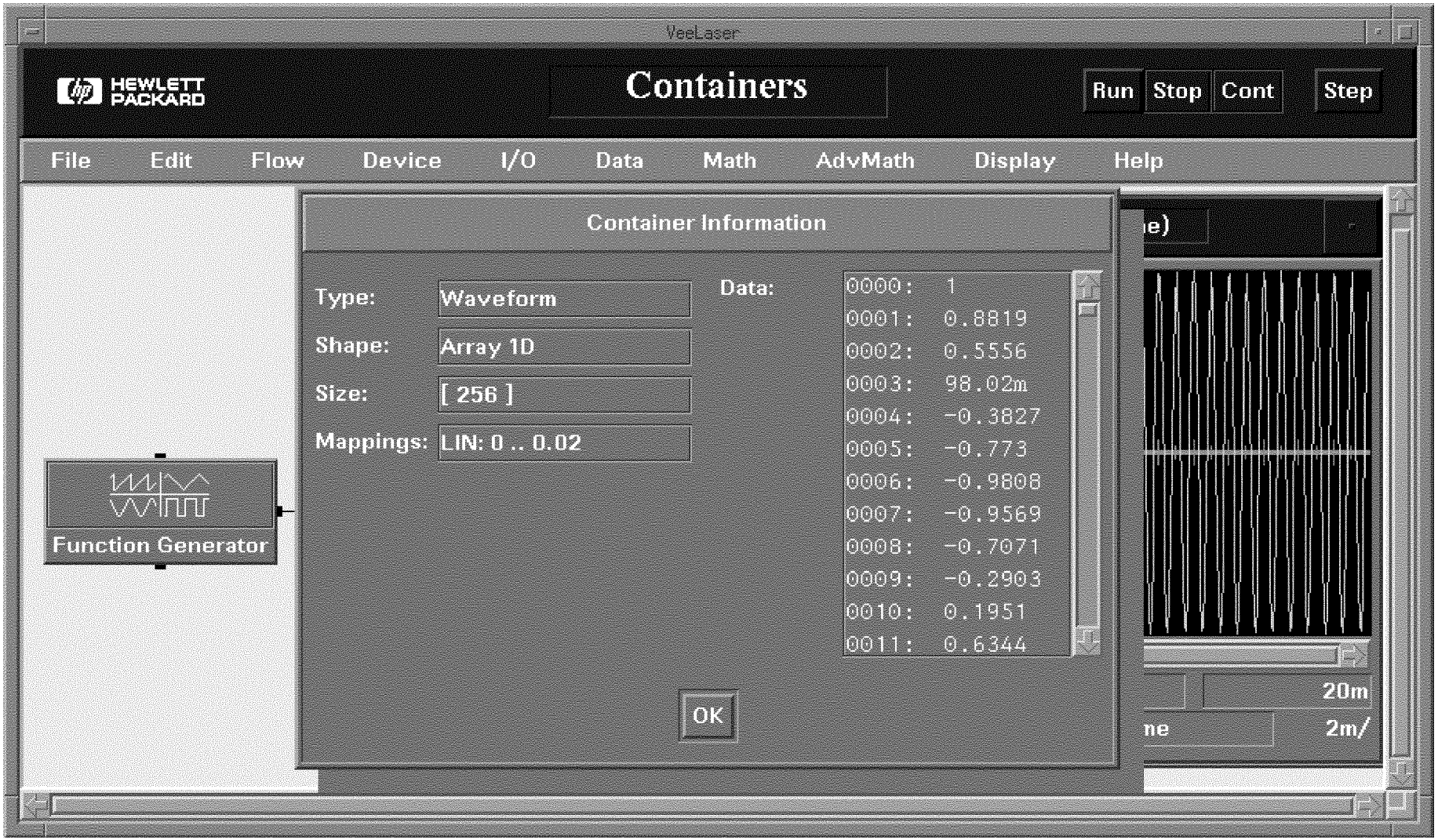

HPVEE
HEWLETT PACKARD
Sending Low-Level HP-IB Commands
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Start
Bus Operations (HP-IB 7)
SEND MSG DCL
SEND CMD "?_U"
SEND LISTEN 23
SEND DATA "D211 WORKED",13,10
SEND UNL
EXECUTE LOCAL
Bus I/O Monitor (HP-IB 7)
>> Fri 17/May/1991 14:33:14 MDT

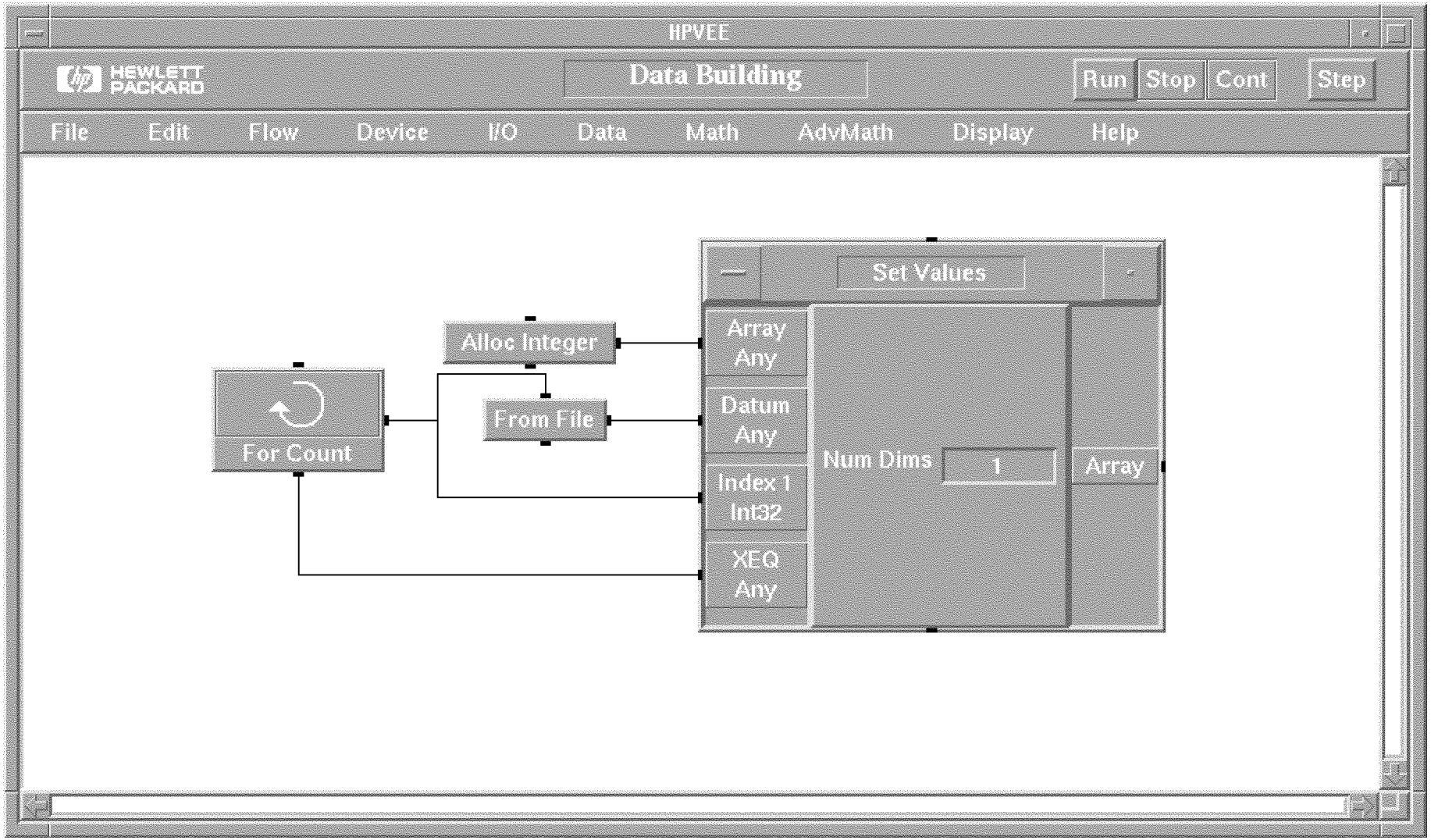

VeeLaser
HEWLETT PACKARD
Sending Low-Level HP-IB Commands
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Start
Bus Operations (HP-IB 7)
SEND MSG DCL
SEND CMD "?_U"
SEND LISTEN 23
SEND DATA "D211 WORKED", 13, 10
SEND UNL
EXECUTE LOCAL
>> Wed 03/Jul/1991 14:46:34 MDT
00000 * 0x14 <DC4> ! DCL
00001 * 0x3f ? ! UNL
00002 * 0x5f _ ! UNT
00003 * 0x55 U ! MTA
00004 * 0x37 7 ! LISTEN 23
00005 > 0x44 D
00006 > 0x32 2
00007 > 0x31 1
00008 > 0x31 1
00009 > 0x20
00010 > 0x57 W
00011 > 0x4f O
00012 > 0x52 R
00013 > 0x4b K
00014 > 0x45 E

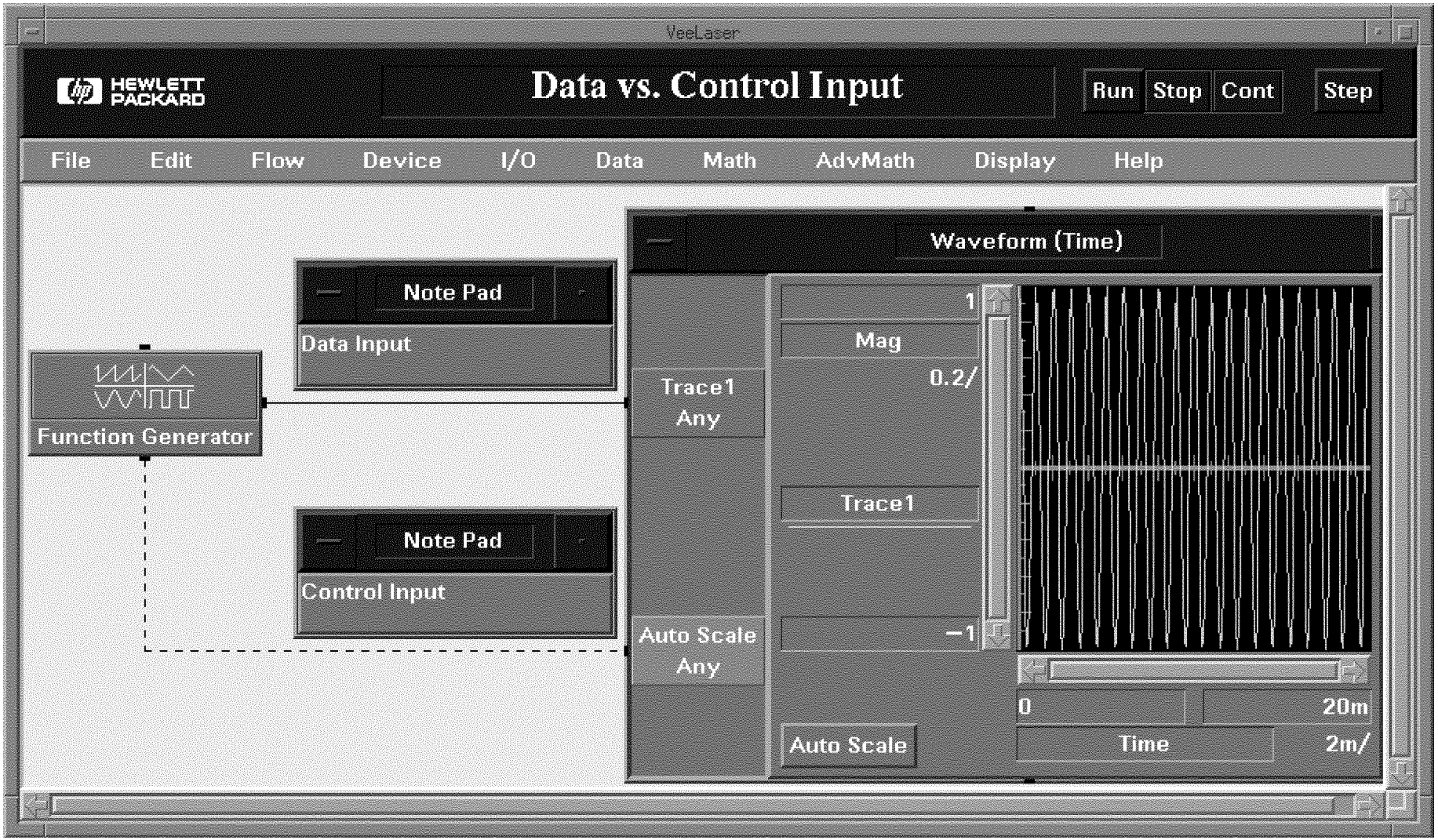

HPVEE
HEWLETT PACKARD
Concatenator
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Text
hello
Integer
0000: 1
0001: 2
Concatenator
A
Any
B
Any
Array
Logging AlphaNumeric
hello
1
2
Container Information
Type:
Text
Shape:
Array 1D
Size:
[3]
Mappings:
None
Data:
0000: hello
0001: 1
0002: 2
OK

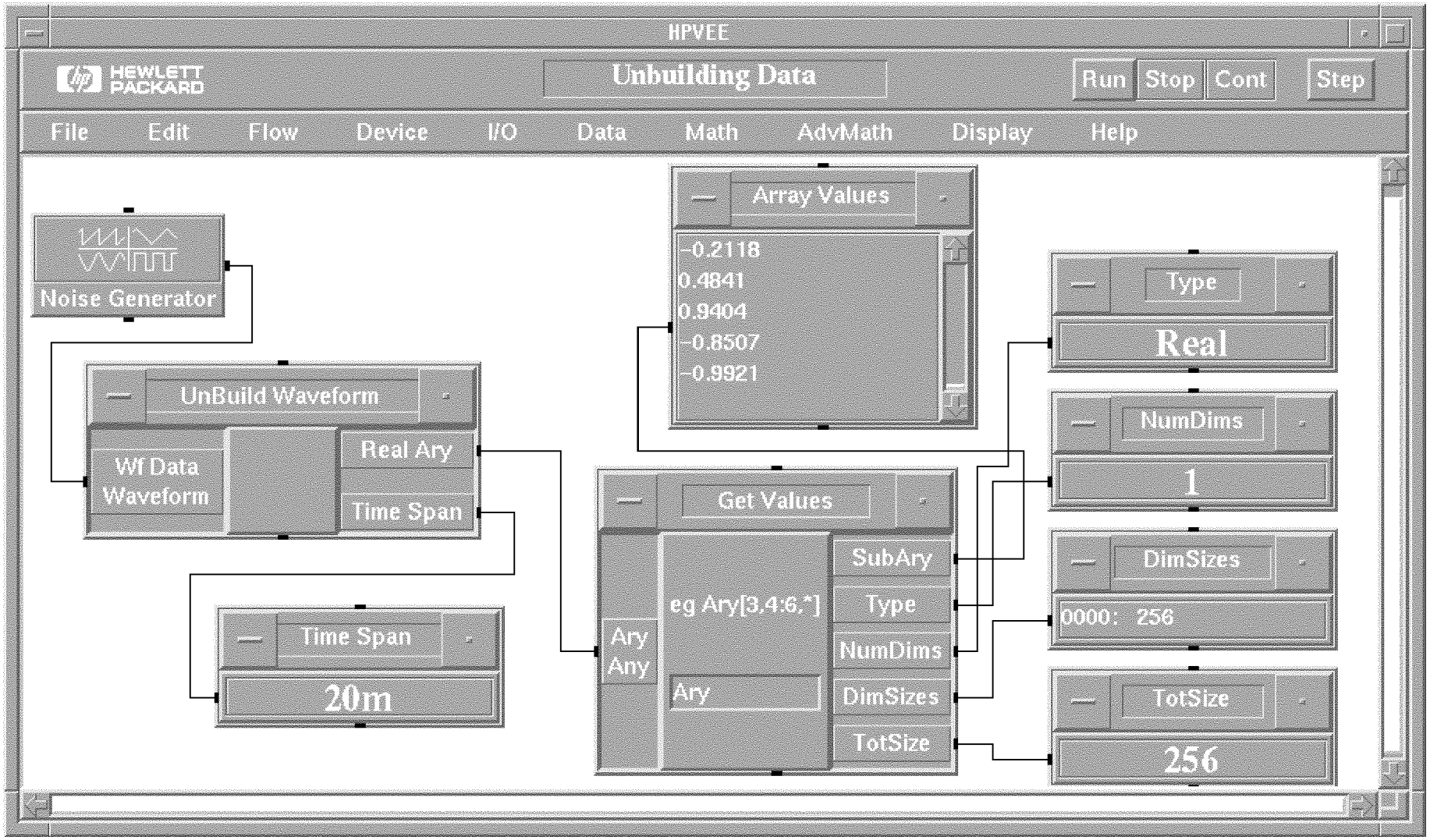

HPVEE
HEWLETT PACKARD
Configure I/O
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Configure I/O Devices
newDevice (hp3245a @ I
dvm (@ HP-IB 700)
Save
Edit...
Ad
Device Configuration
Name:
dvm
Interface:
HP-IB
Address (eg 714):
723
Device Type:
hp3478a
Timeout (sec):
5
Live Mode:
ON
Direct I/O Config ...
Instrument Driver Config ...
OK
Cancel
Read from what Instrument Description file?
hp34524.cid
hp3456a.cid
hp3457a.cid
hp3458a.cid
hp3478a.cid
hp3488a2.cid
hp3488a3.cid
hp3488a4.cid
hp3488a5.cid
/usr/lib/veetest/instruments/hp3478a.cid
OK
Cancel

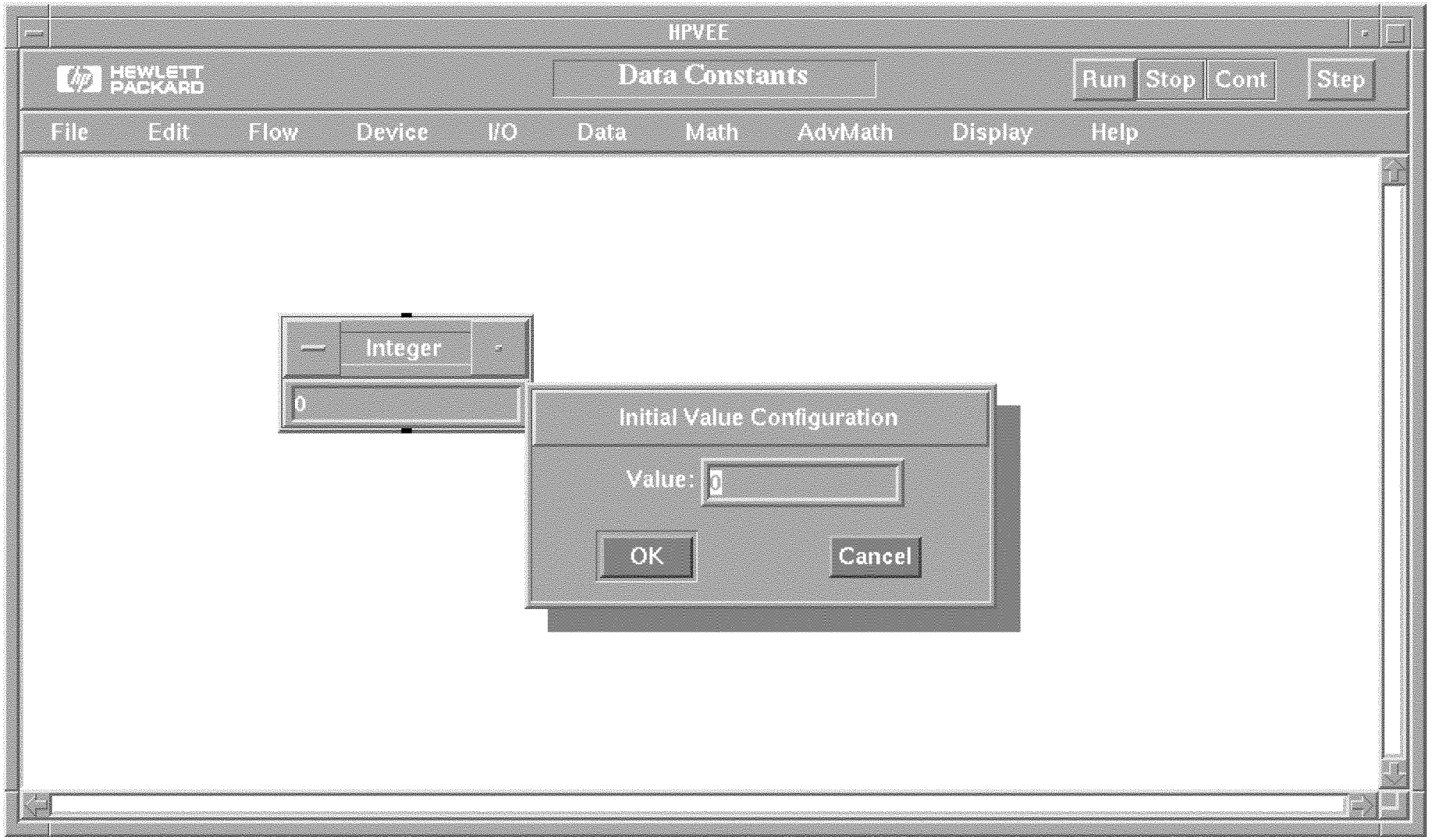

HPVEE
HEWLETT PACKARD
Configure I/O
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Configure I/O Devices
newD
dmv (
Save
Device Configuration
Name:
dmv
Interface:
HP-IB
Address (eg 714):
723
Device Type:
hp3478a
Timeout (sec):
5
Live Mode:
OFF
Direct I/O Config ...
Instrument Driver Config ...
OK
Cancel
Direct I/O Configuration
Read Terminator:
"\n"
Write
EOL Sequence:
"\n"
Multi-Field as:
Data Only
Array Separator:
","
Array Format:
Linear
END (EOI) on EOL:
NO
Conformance:
IEEE 488
Binblock:
None
State (Learn String):
Not Config'd
OK
Cancel
Select Conformance:
IEEE 488
IEEE 488.2
IEEE 488
OK
Cancel

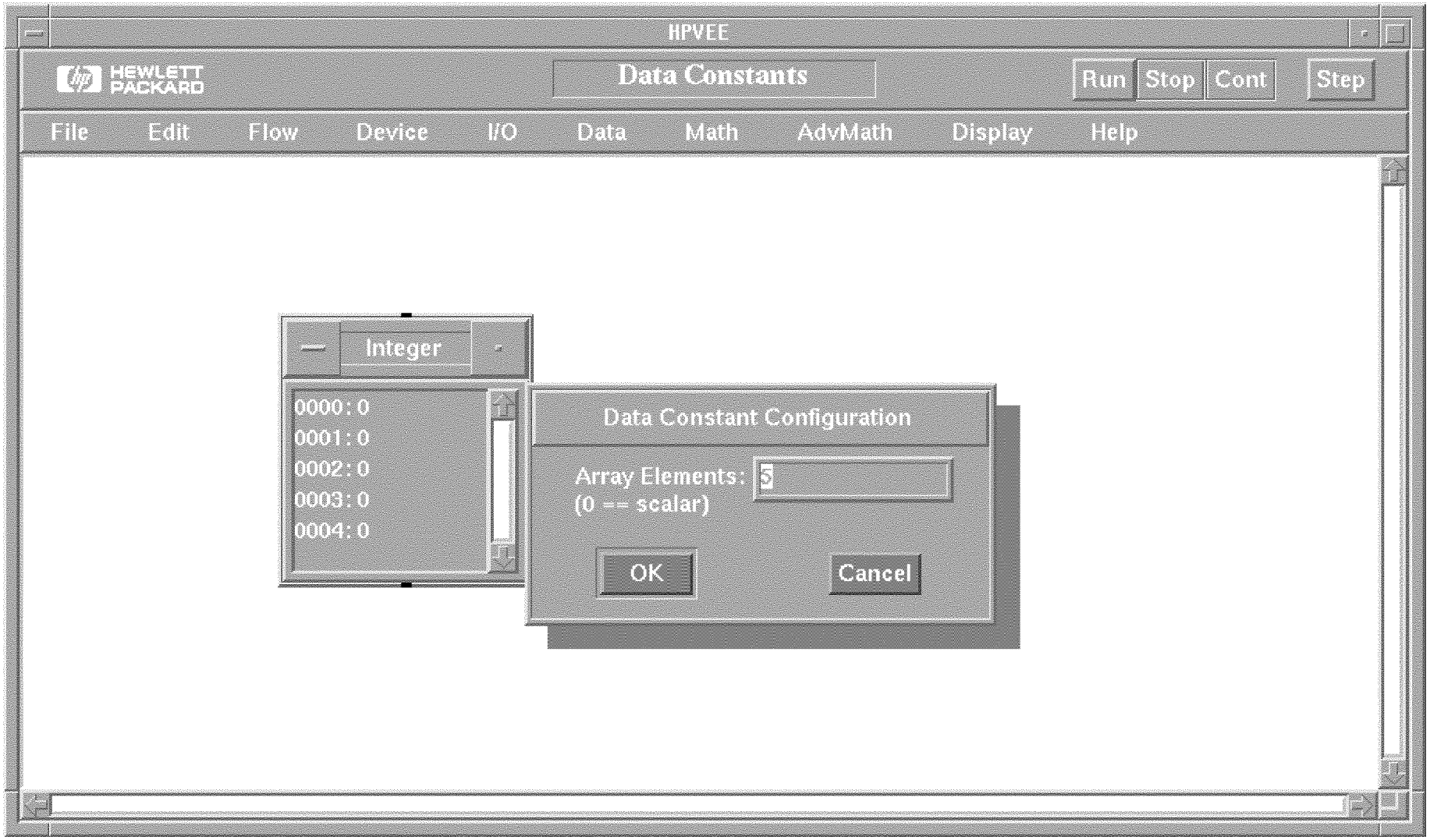

VeeLaser
HEWLETT PACKARD
Containers
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Container Information
Type:
Waveform
Shape:
Array 1D
Size:
[256]
Mappings:
LIN: 0 .. 0.02
Data:
0000: 1
0001: 0.8819
0002: 0.5556
0003: 98.02m
0004: -0.3827
0005: -0.773
0006: -0.9808
0007: -0.9569
0008: -0.7071
0009: -0.2903
0010: 0.1951
0011: 0.6344
OK
Function Generator
20m
2m/

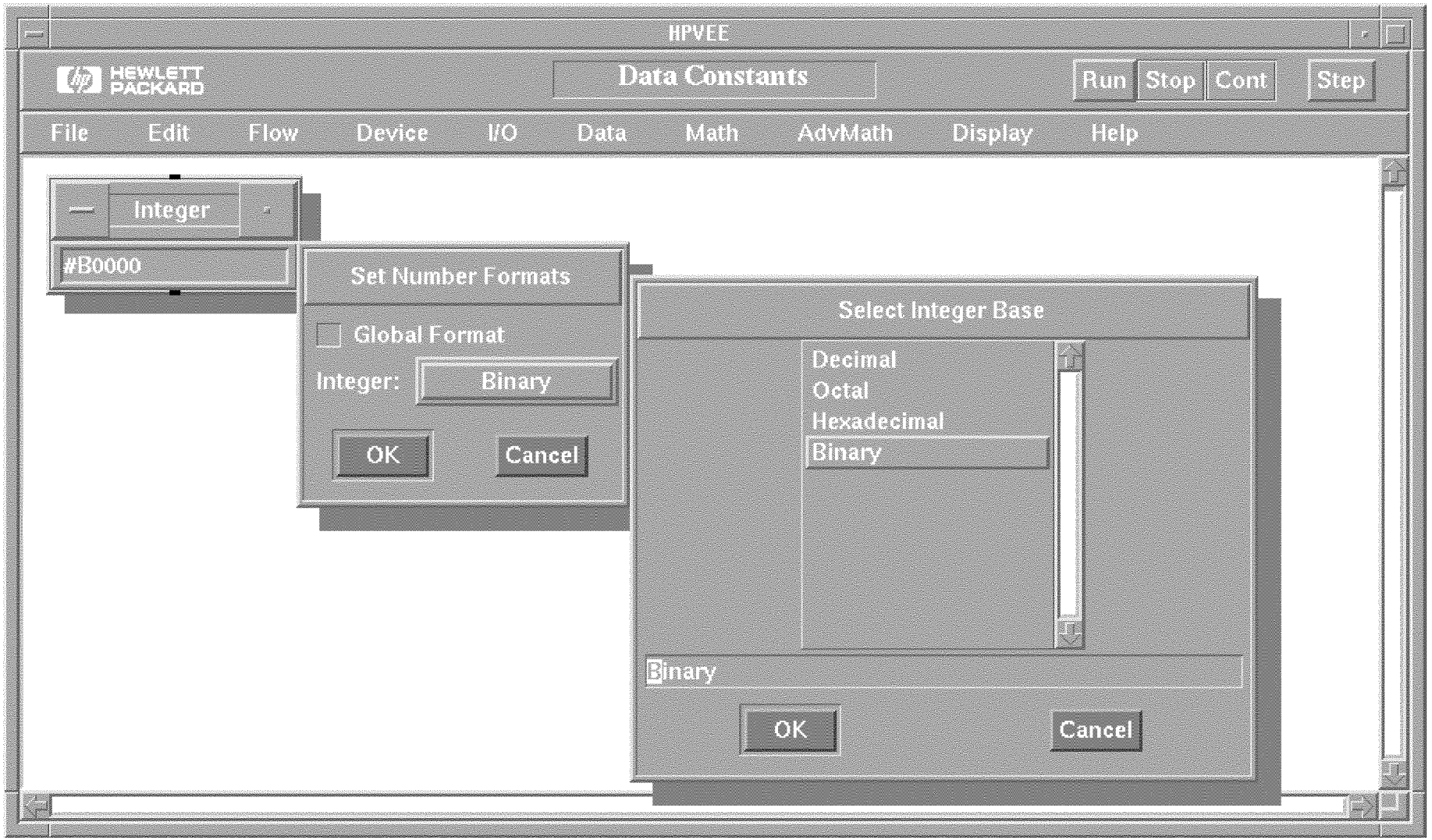

HPVEE
HEWLETT PACKARD
Data Building
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Set Values
Alloc Integer
From File
For Count
Array
Any
Datum
Any
Index 1
Int32
XEQ
Any
Num Dims
1
Array

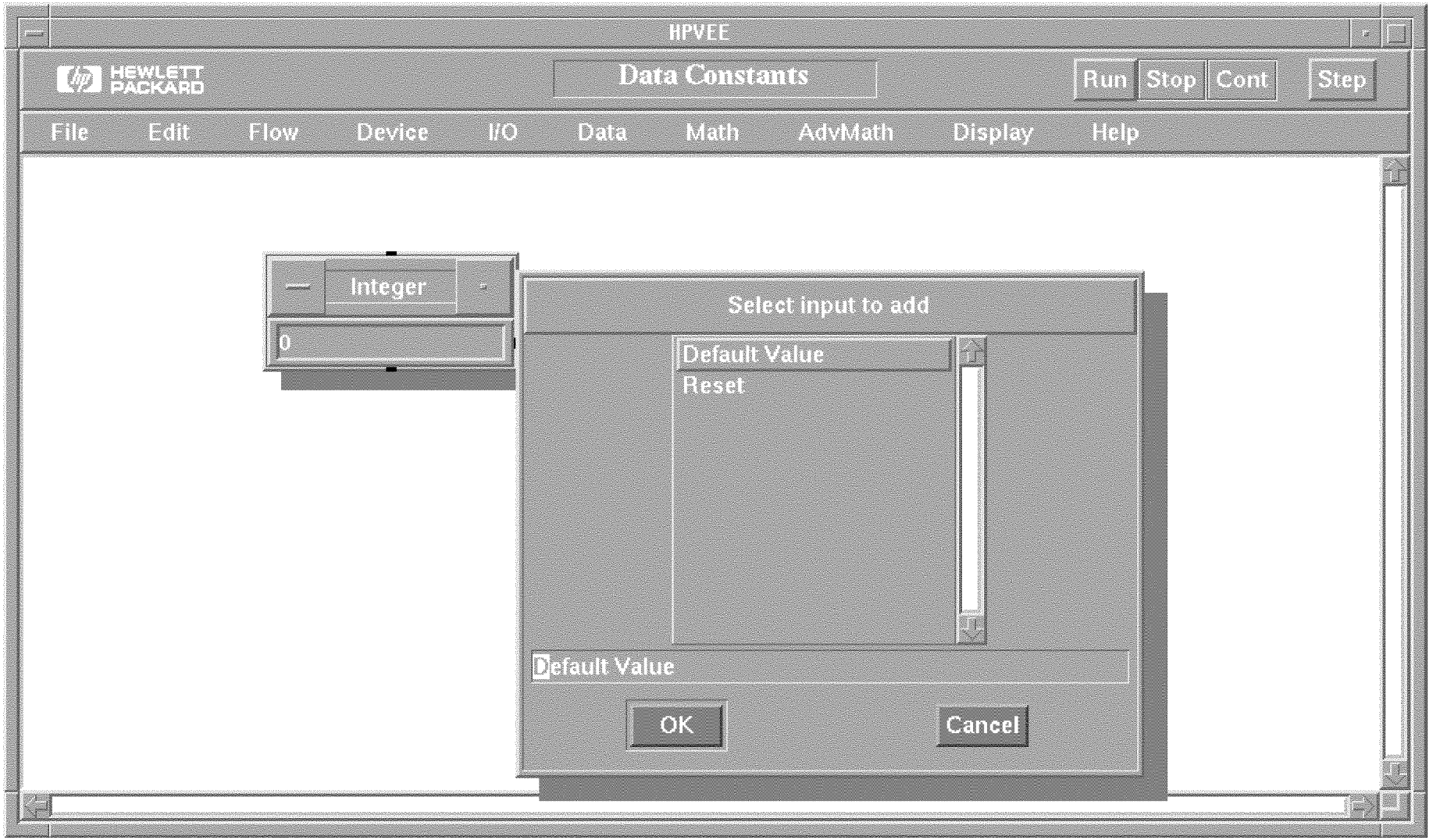

VeeLaser
HEWLETT PACKARD
Data vs. Control Input
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Note Pad
Data Input
Function Generator
Note Pad
Control Input
Waveform (Time)
1
Mag
0.2/
Trace1
Any
Trace1
Auto Scale
Any
−1
0
20m
Auto Scale
Time
2m/

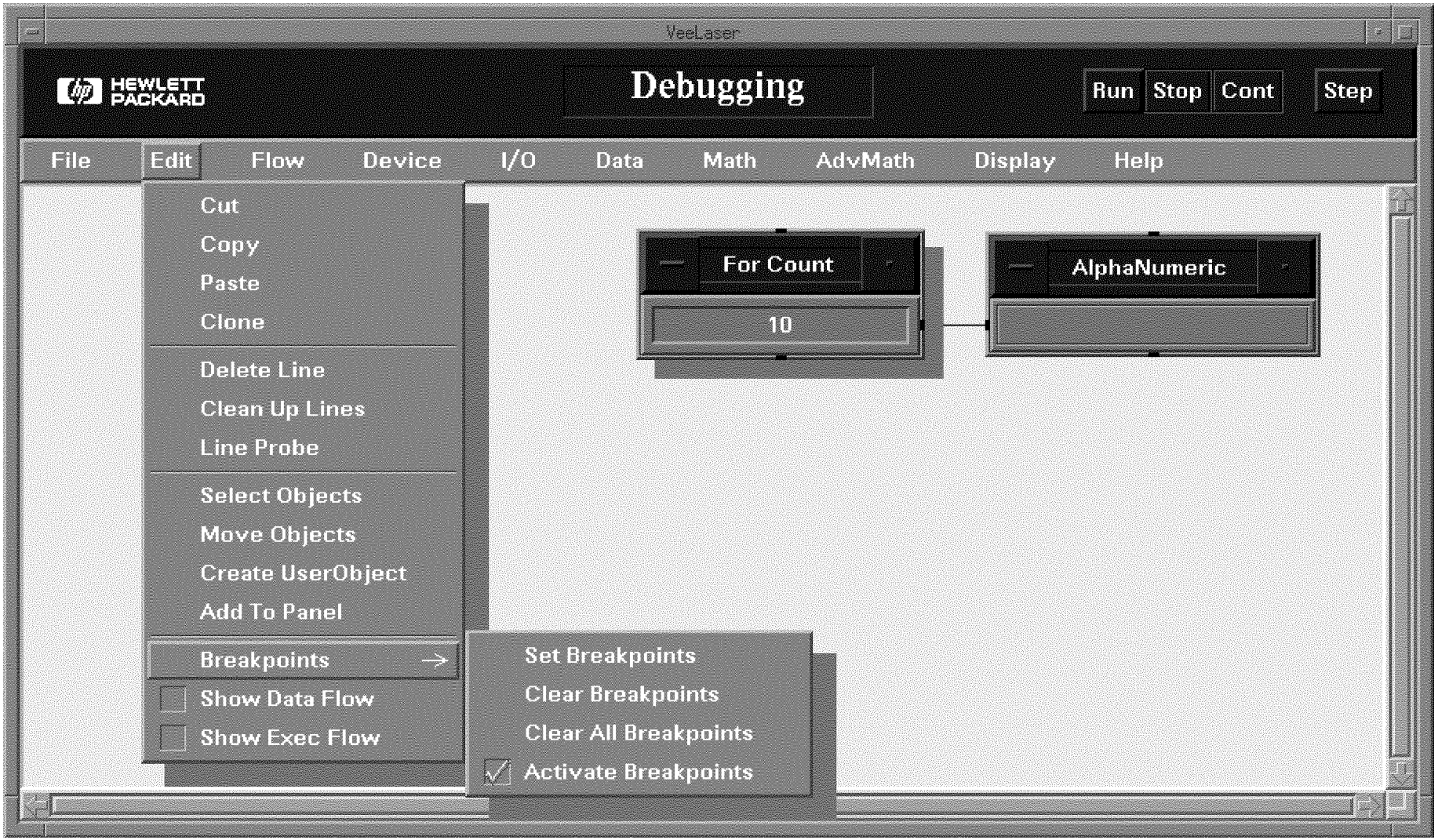

HPVEE
HEWLETT PACKARD
Unbuilding Data
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Noise Generator
UnBuild Waveform
Wf Data Waveform
Real Ary
Time Span
Time Span
20m
Array Values
-0.2118
0.4841
0.9404
-0.8507
-0.9921
Get Values
Ary Any
eg Ary[3,4:6,*]
Ary
SubAry
Type
NumDims
DimSizes
TotSize
Type
Real
NumDims
1
DimSizes
0000: 256
TotSize
256

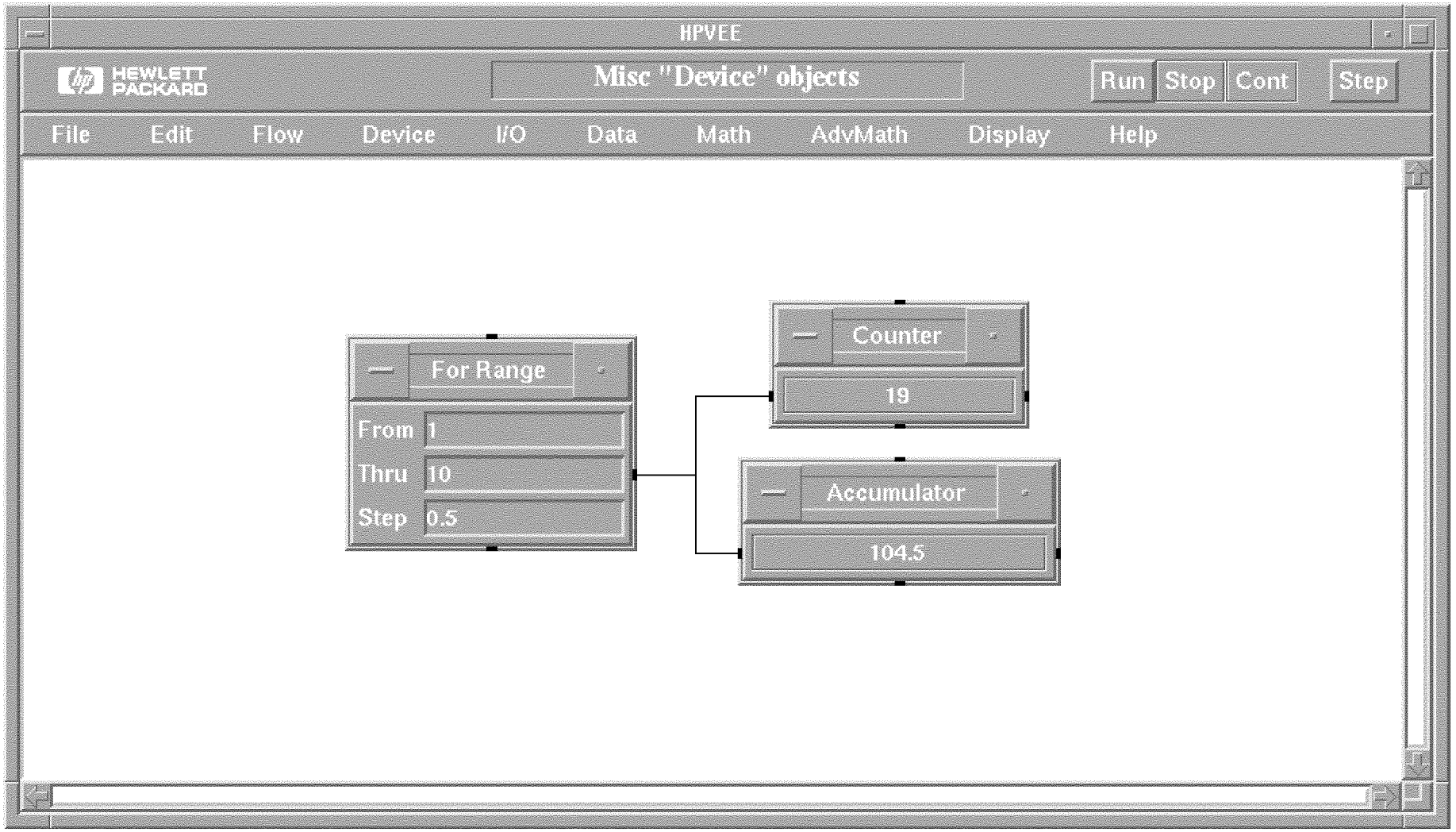

HPVEE
HEWLETT PACKARD
Data Constants
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Integer
0
Initial Value Configuration
Value:
0
OK
Cancel

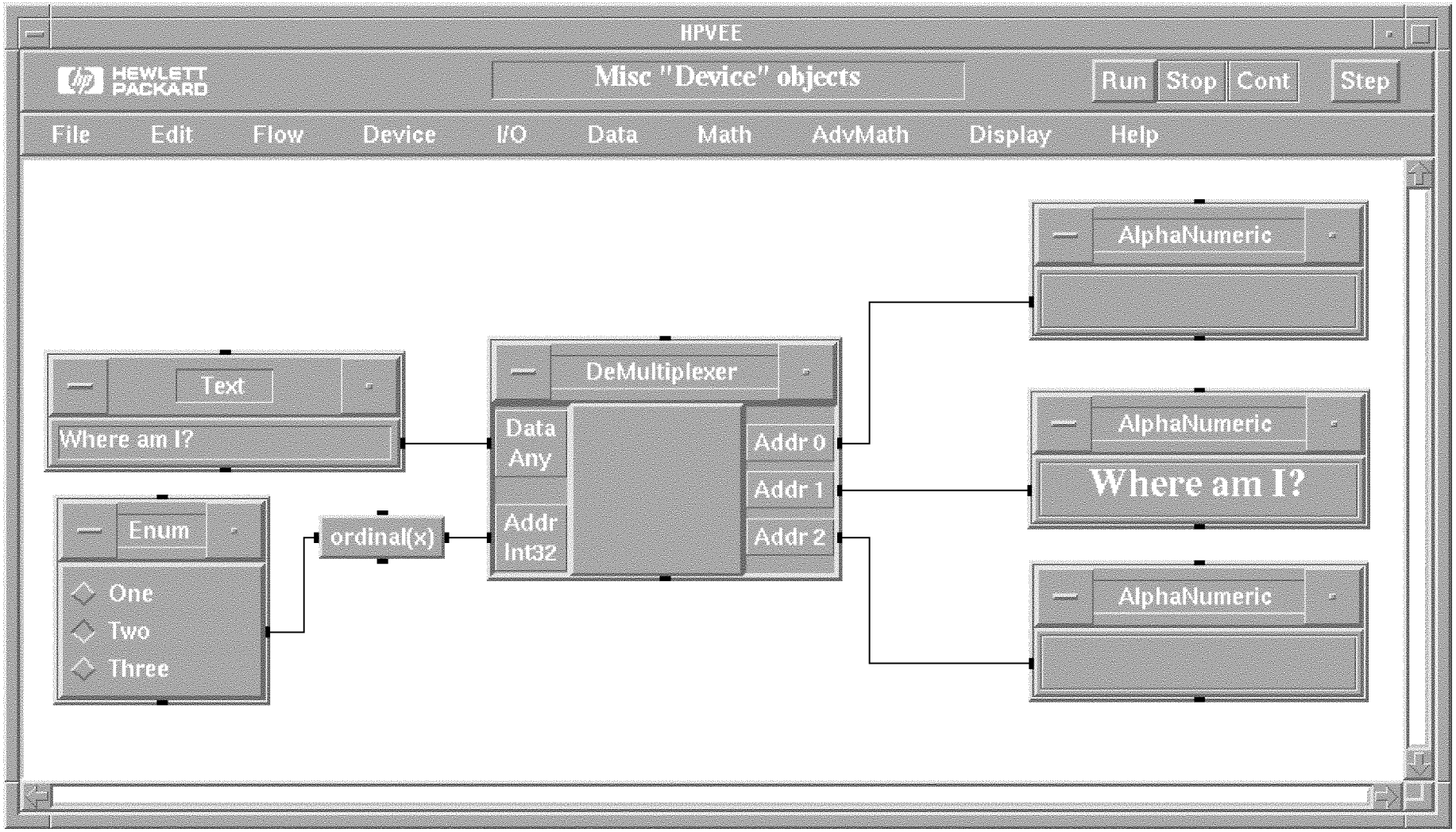

HPVEE
HEWLETT PACKARD
Data Constants
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Integer
0000: 0
0001: 0
0002: 0
0003: 0
0004: 0
Data Constant Configuration
Array Elements:
(0 == scalar)
5
OK
Cancel


HPVEE
HEWLETT PACKARD
Data Constants
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Integer
#B0000
Set Number Formats
Global Format
Integer:
Binary
OK
Cancel
Select Integer Base
Decimal
Octal
Hexadecimal
Binary
Binary
OK
Cancel

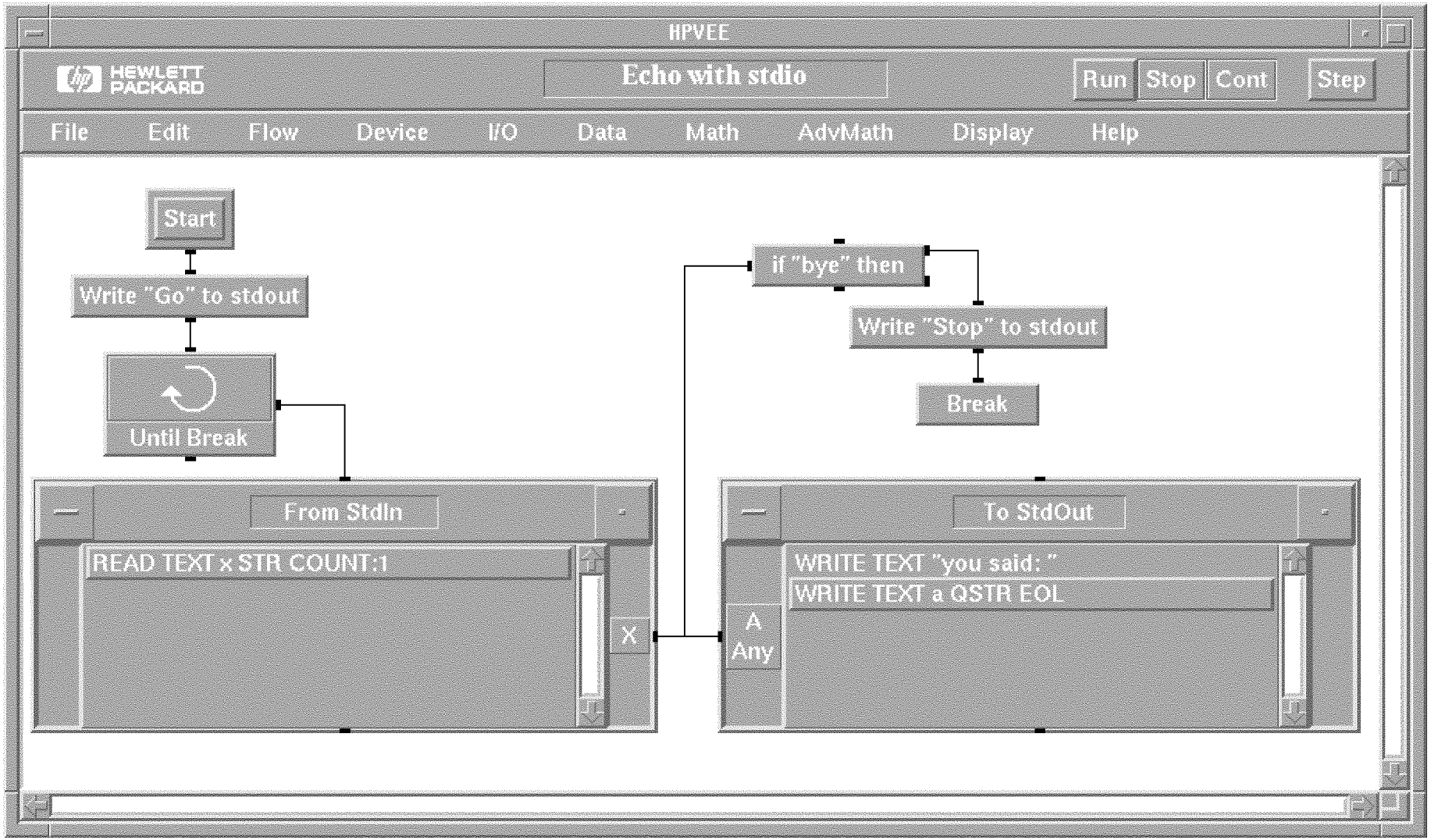

HPVEE
HEWLETT PACKARD
Data Constants
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Integer
0
Select input to add
Default Value
Reset
Default Value
OK
Cancel

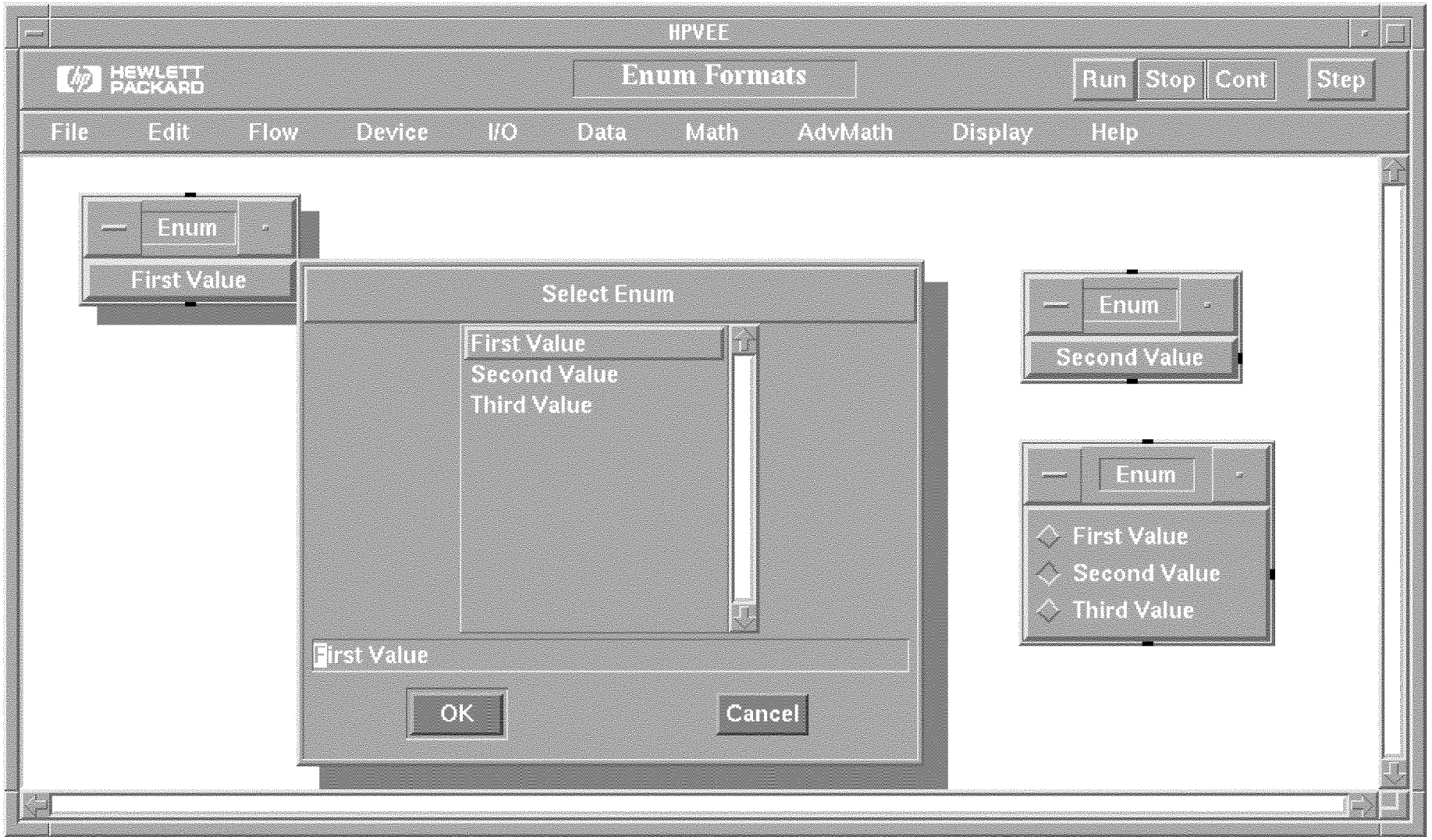

VeeLaser
HEWLETT PACKARD
Debugging
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Cut
Copy
Paste
Clone
Delete Line
Clean Up Lines
Line Probe
Select Objects
Move Objects
Create UserObject
Add To Panel
Breakpoints
Show Data Flow
Show Exec Flow
Set Breakpoints
Clear Breakpoints
Clear All Breakpoints
Activate Breakpoints
For Count
10
AlphaNumeric

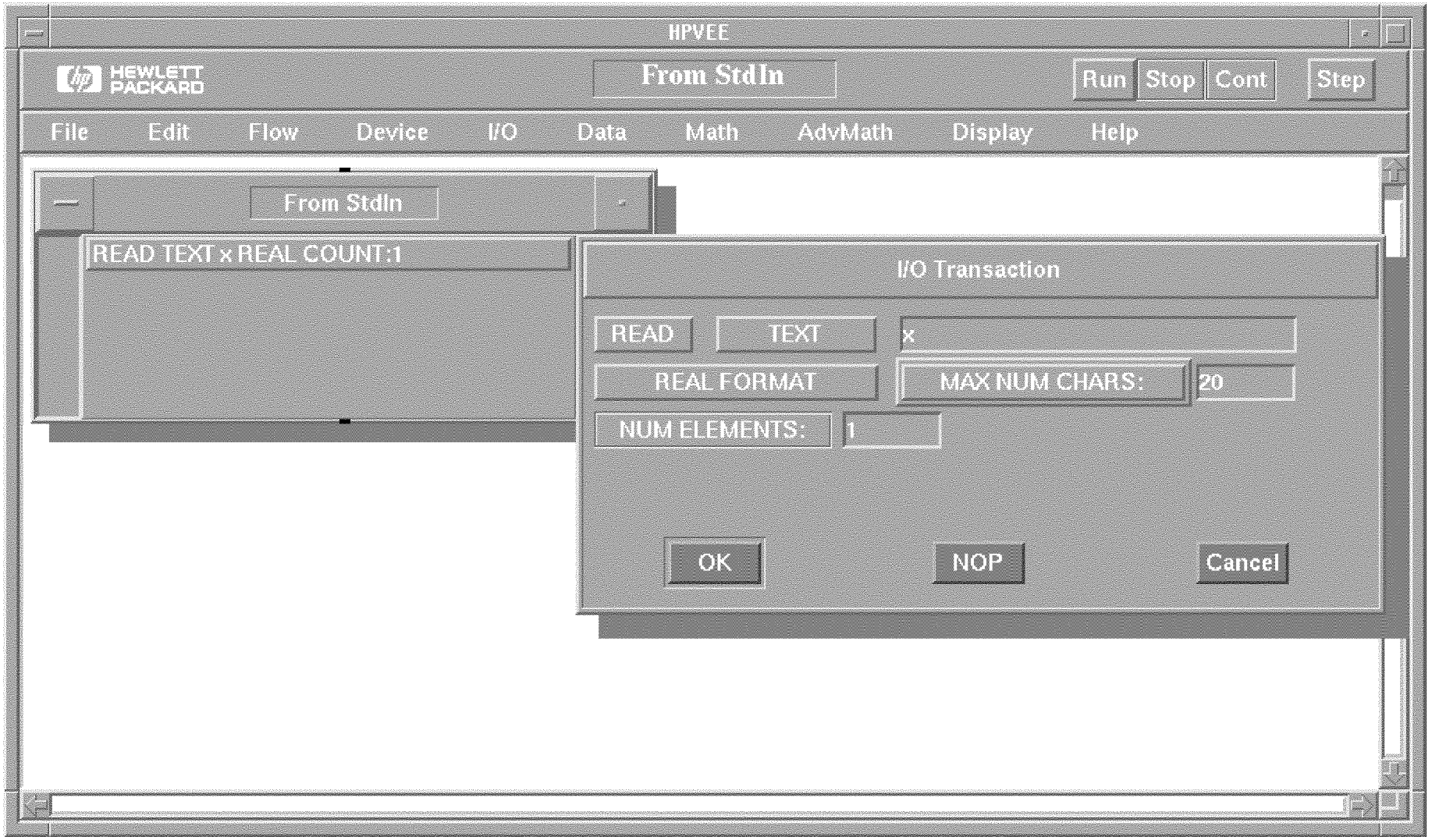

HPVEE
HEWLETT PACKARD
Misc "Device" objects
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
For Range
From 1
Thru 10
Step 0.5
Counter
19
Accumulator
104.5

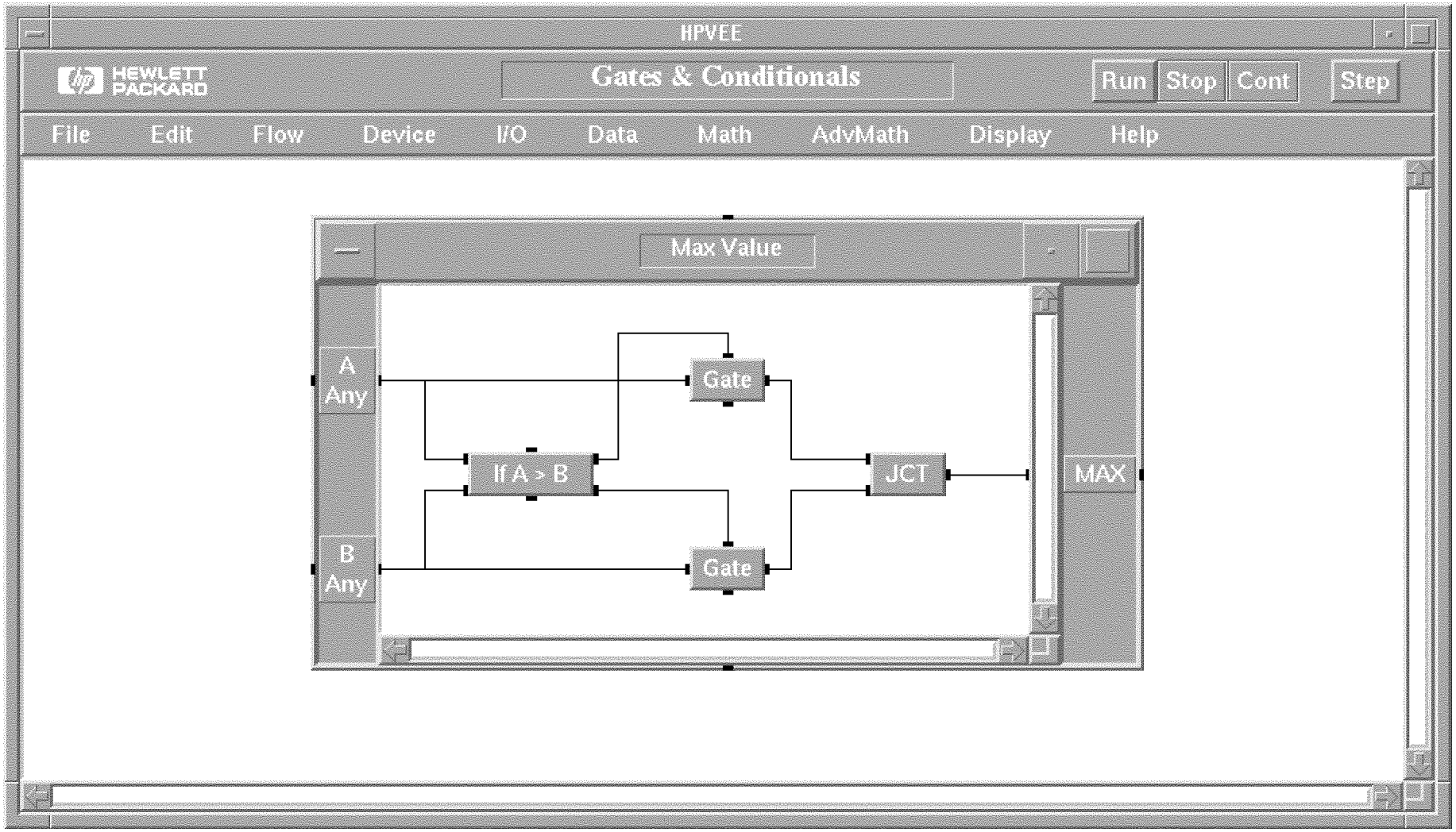

HPVEE
HEWLETT PACKARD
Misc "Device" objects
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Text
Where am I?
Enum
One
Two
Three
ordinal(x)
DeMultiplexer
Data
Any
Addr
Int32
Addr 0
Addr 1
Addr 2
AlphaNumeric
AlphaNumeric
Where am I?
AlphaNumeric

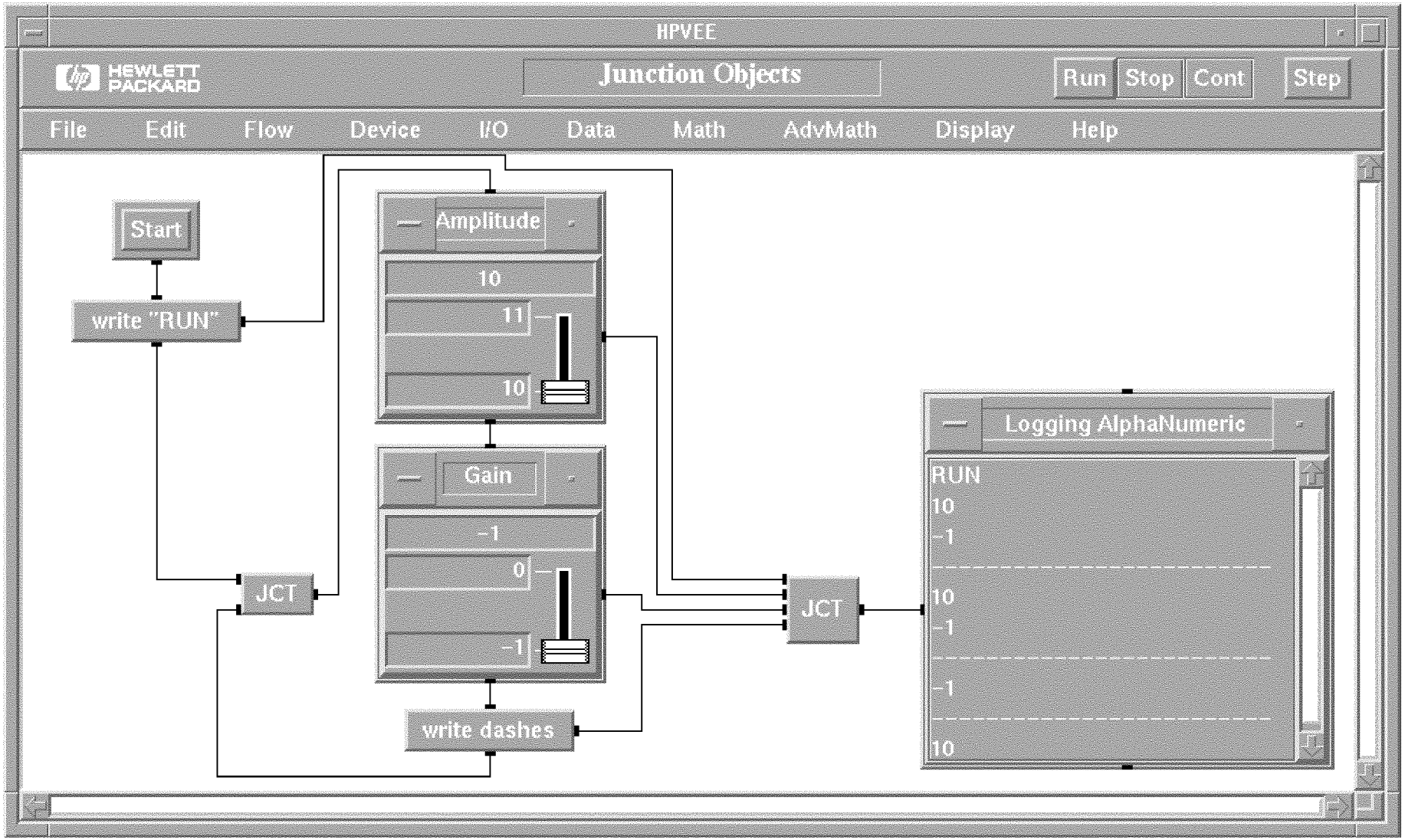

VeeLaser
HEWLETT PACKARD
Direct I/O
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Text
WORKING
Enum
DC Volts
AC Volts
2-wire Ohms
Set up Voltmeter (hp3478a @ HP-IB 723)
Mesg
Any
A
Any
EXECUTE CLEAR
WAIT INTERVAL:3
WRITE CASE a OF "F1","F2","F3" EOL
WRITE TEXT "RON3T1ZO" STR EOL
WRITE TEXT "D3",Mesg STR FW:9 RJ EOL
READ TEXT x REAL COUNT:3
WRITE TEXT "D1" EOL
Logging AlphaNumeric
4.1m
3.6m
3.6m

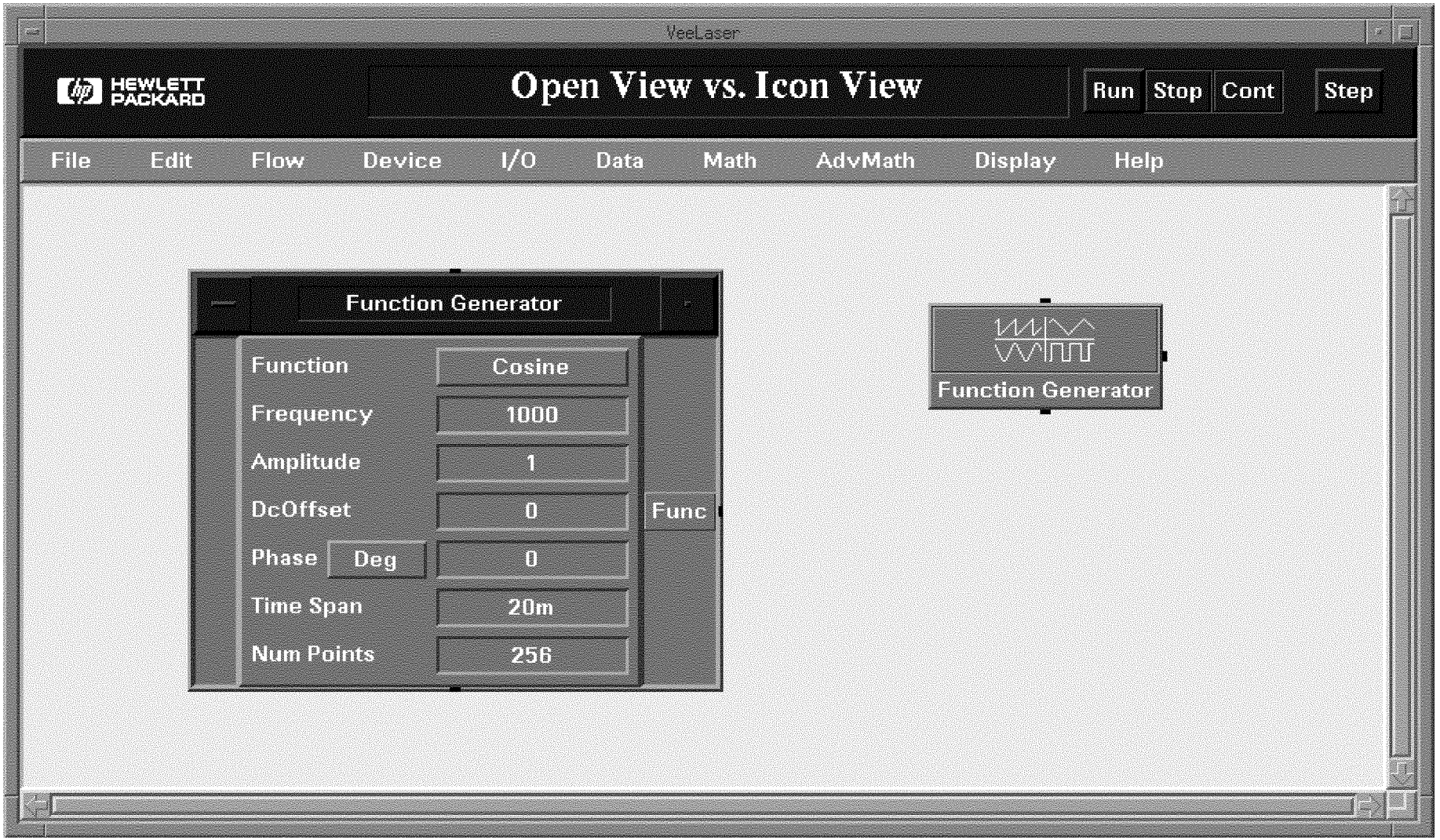

HPVEE
HEWLETT PACKARD
Echo with stdio
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Start
Write "Go" to stdout
Until Break
From StdIn
READ TEXT x STR COUNT:1
X
if "bye" then
Write "Stop" to stdout
Break
To StdOut
WRITE TEXT "you said: "
WRITE TEXT a QSTR EOL
A
Any

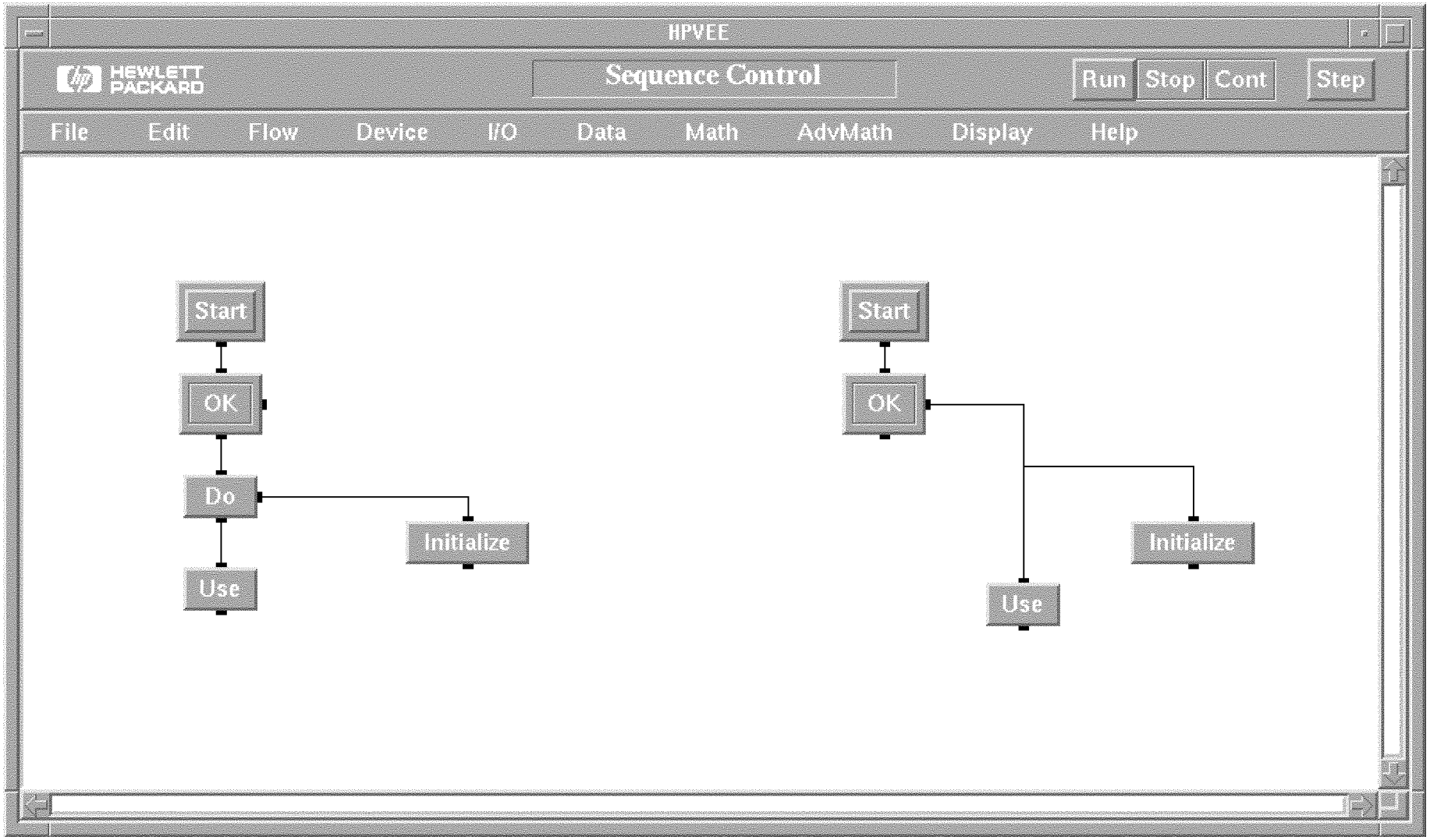

HPVEE
HEWLETT PACKARD
Enum Formats
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Enum
First Value
Select Enum
First Value
Second Value
Third Value
First Value
OK
Cancel
Enum
Second Value
Enum
First Value
Second Value
Third Value

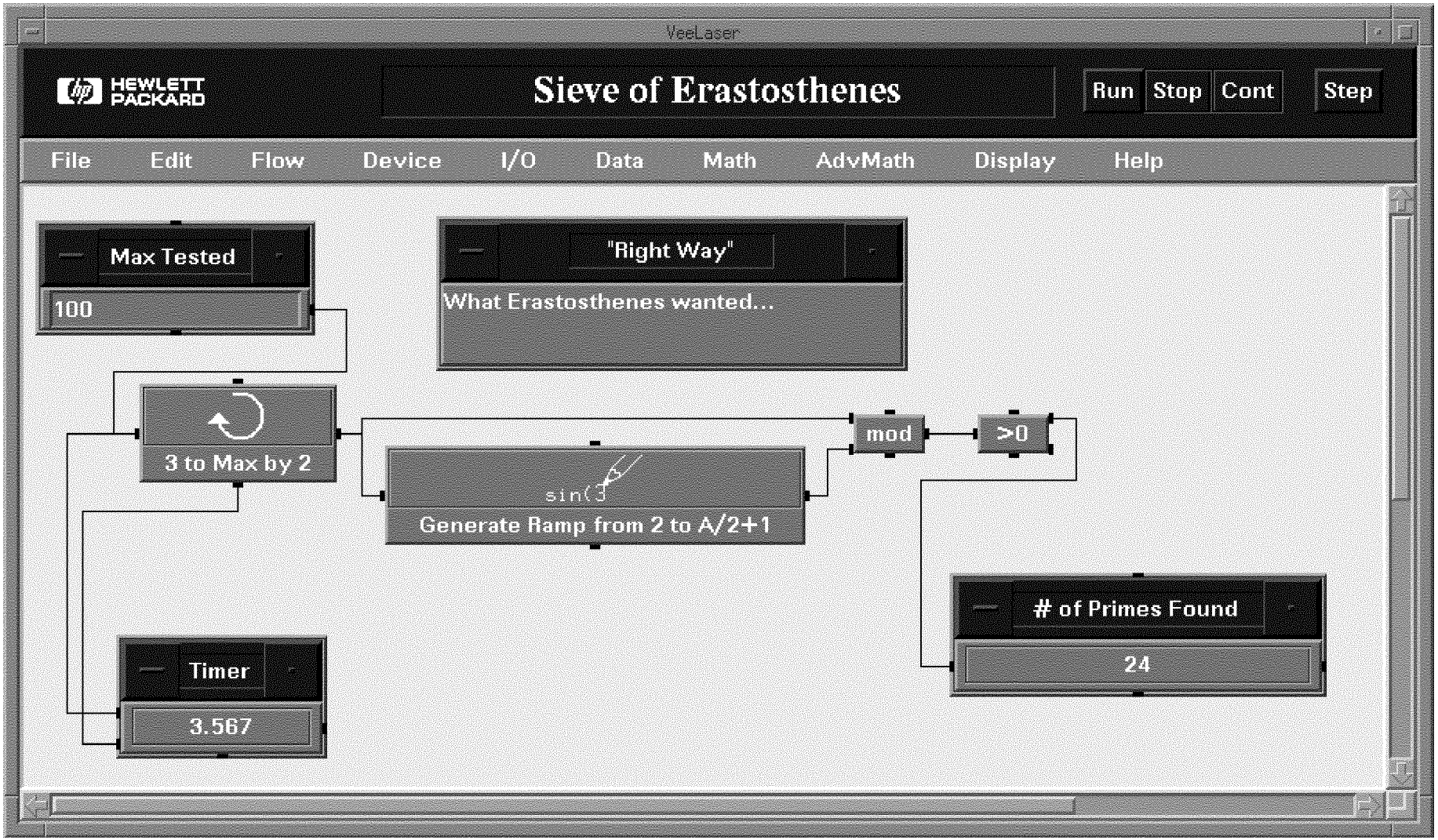

HPVEE
HEWLETT PACKARD
From StdIn
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
From StdIn
READ TEXT x REAL COUNT:1
I/O Transaction
READ
TEXT
x
REAL FORMAT
MAX NUM CHARS:
20
NUM ELEMENTS:
1
OK
NOP
Cancel

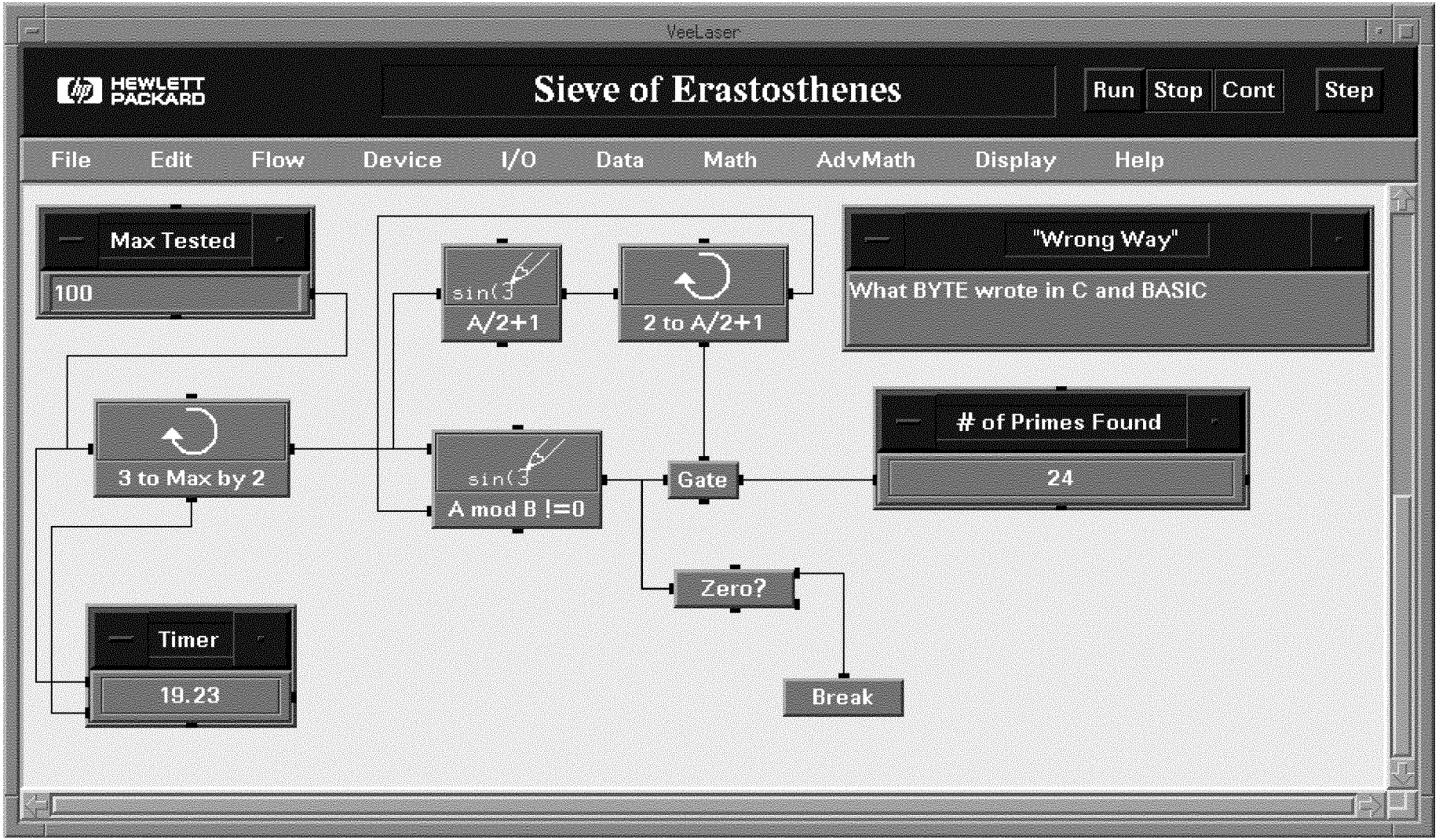

HPVEE
HEWLETT PACKARD
Gates & Conditionals
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Max Value
A
Any
B
Any
Gate
If A > B
Gate
JCT
MAX

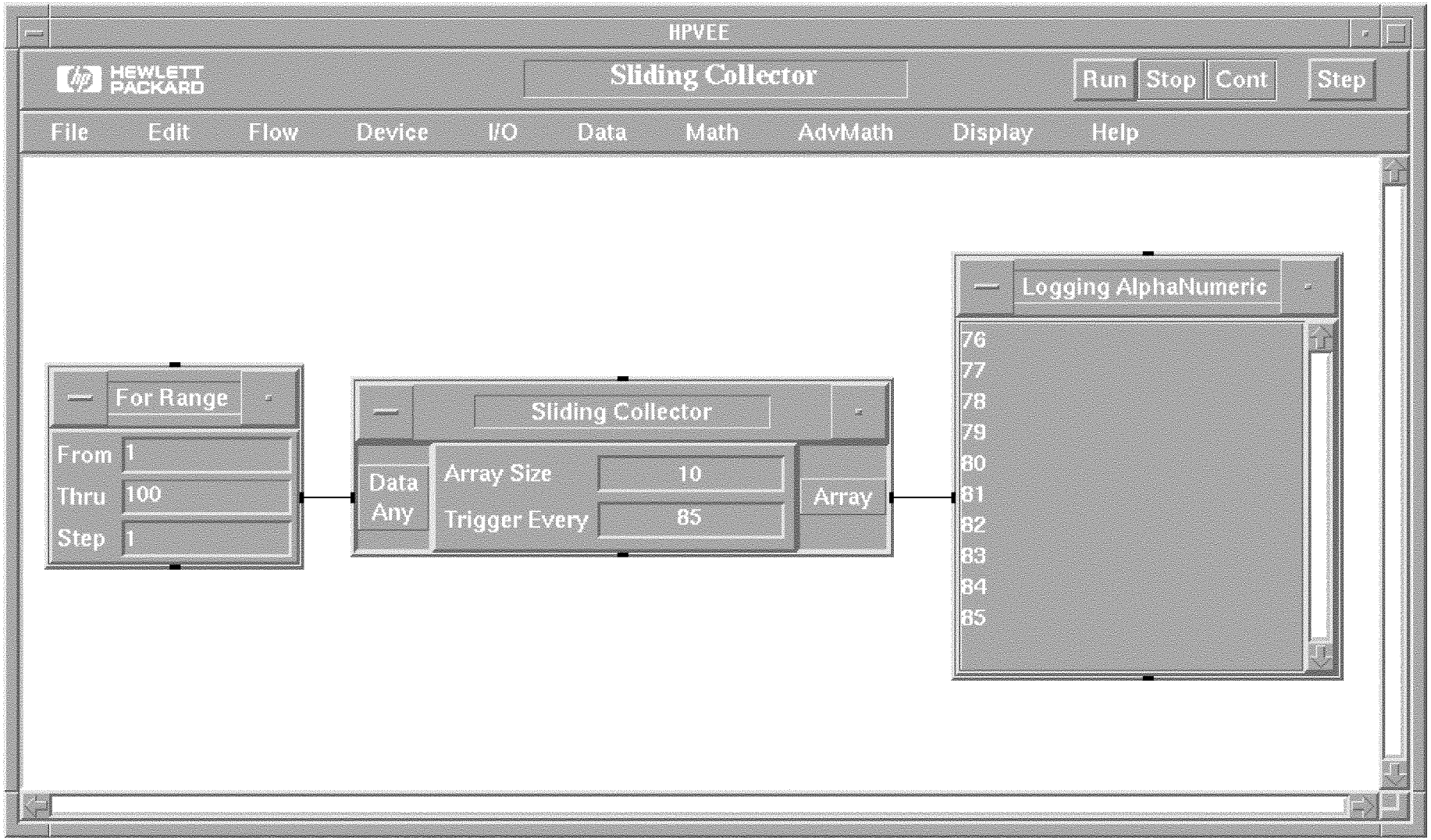

HPVEE
HEWLETT PACKARD
Junction Objects
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Start
write "RUN"
Amplitude
10
11
10
Gain
-1
0
-1
JCT
JCT
write dashes
Logging AlphaNumeric
RUN
10
-1
10
-1
-1
10

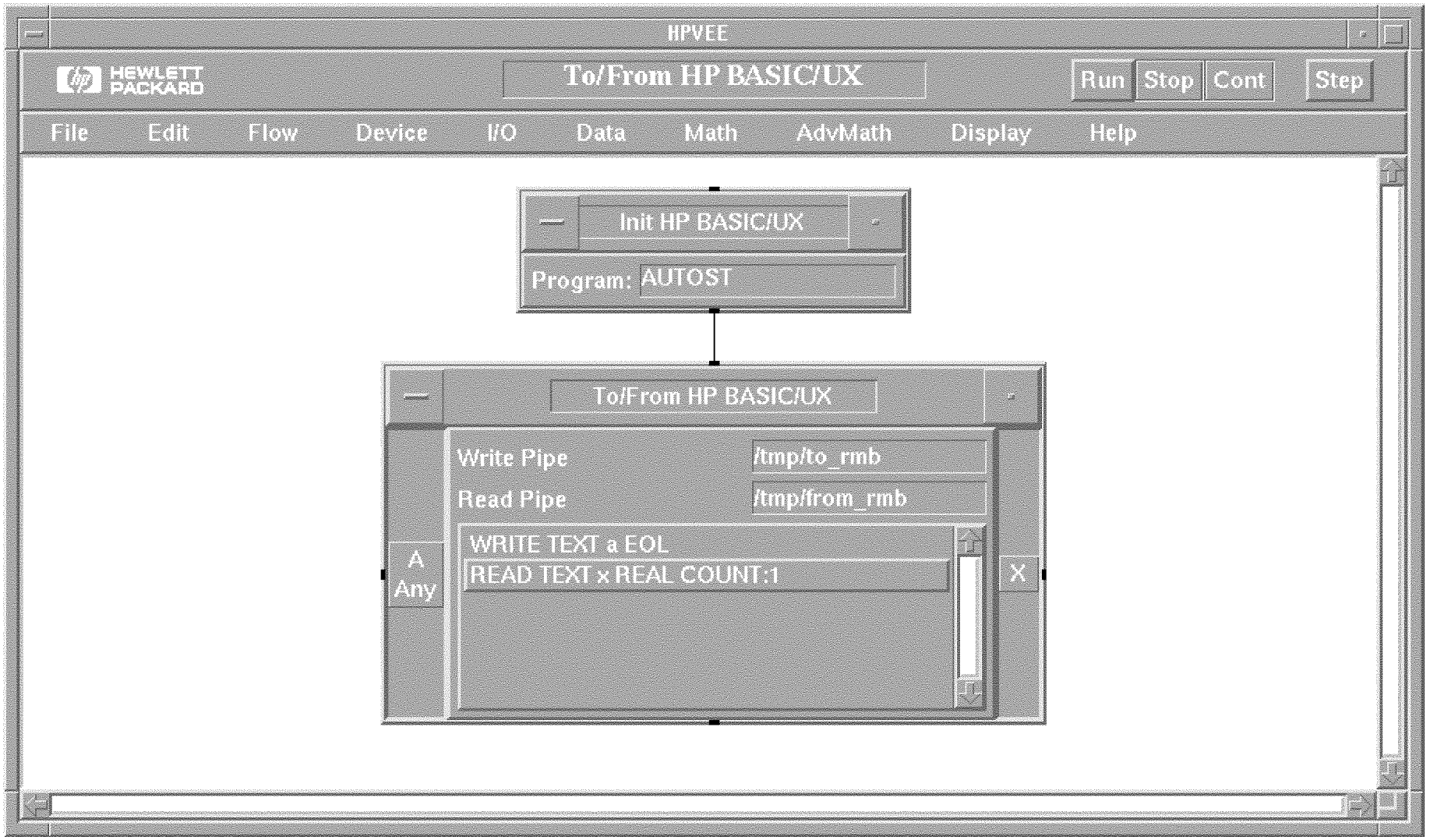

VeeLaser
HEWLETT PACKARD
Open View vs. Icon View
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Function Generator
Function
Cosine
Frequency
1000
Amplitude
1
DcOffset
0
Phase
Deg
0
Time Span
20m
Num Points
256
Func
Function Generator

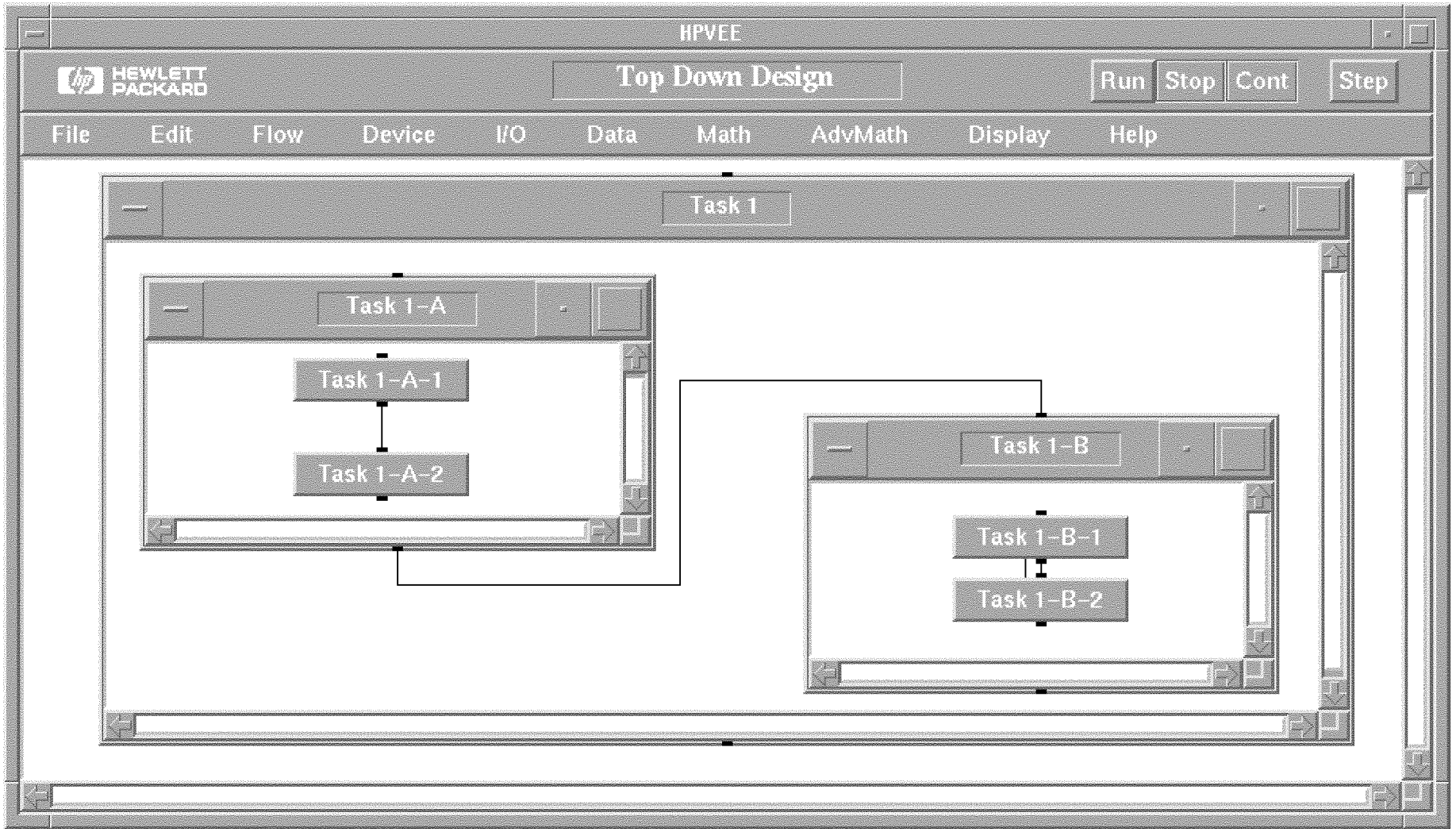

HPVEE
HEWLETT PACKARD
Sequence Control
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Start
OK
Do
Initialize
Use
Start
OK
Initialize
Use

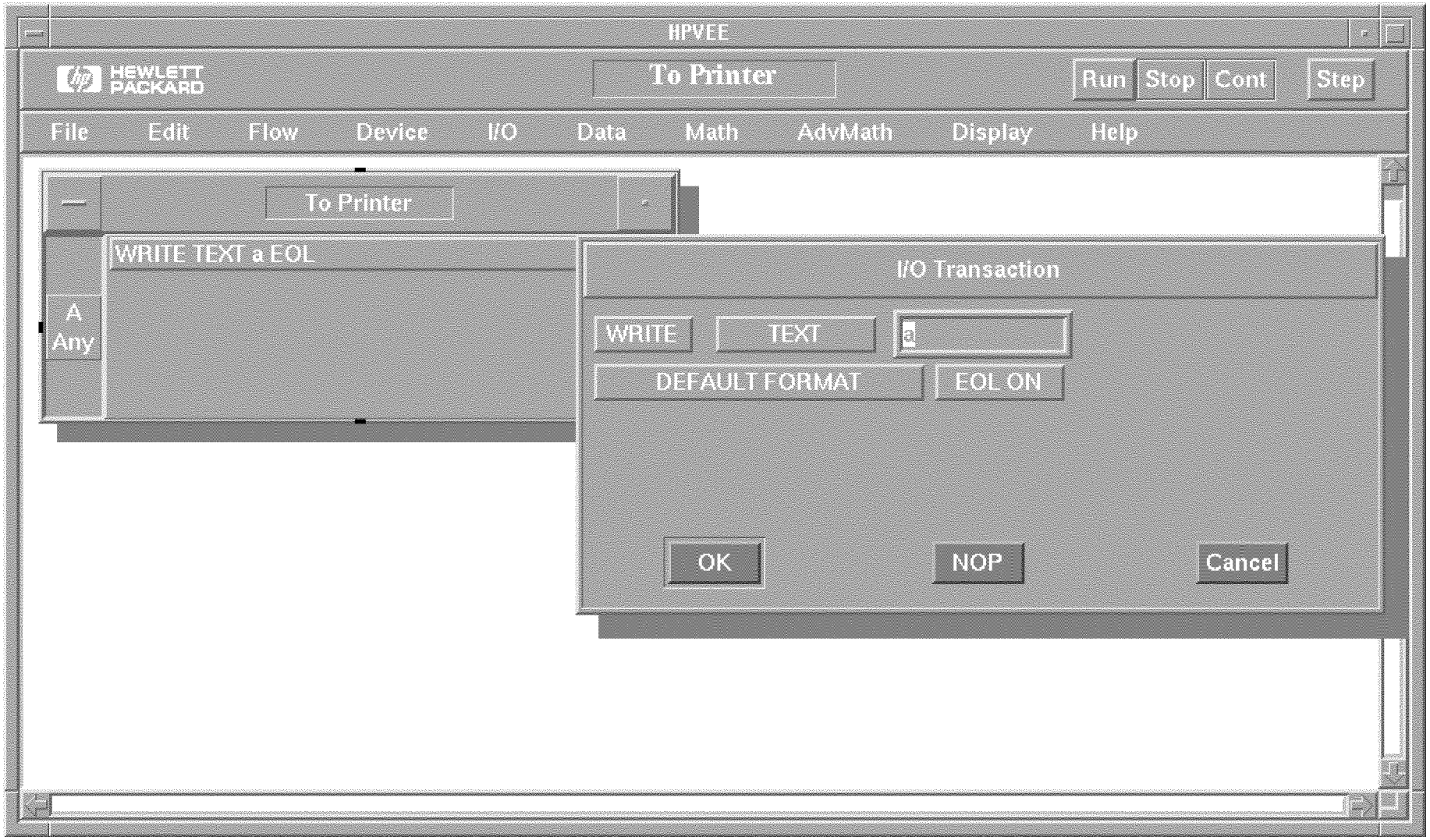

VeeLaser
HEWLETT PACKARD
Sieve of Erastosthenes
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Max Tested
100
"Right Way"
What Erastosthenes wanted...
3 to Max by 2
mod
>0
sin(
Generate Ramp from 2 to A/2+1
# of Primes Found
24
Timer
3.567

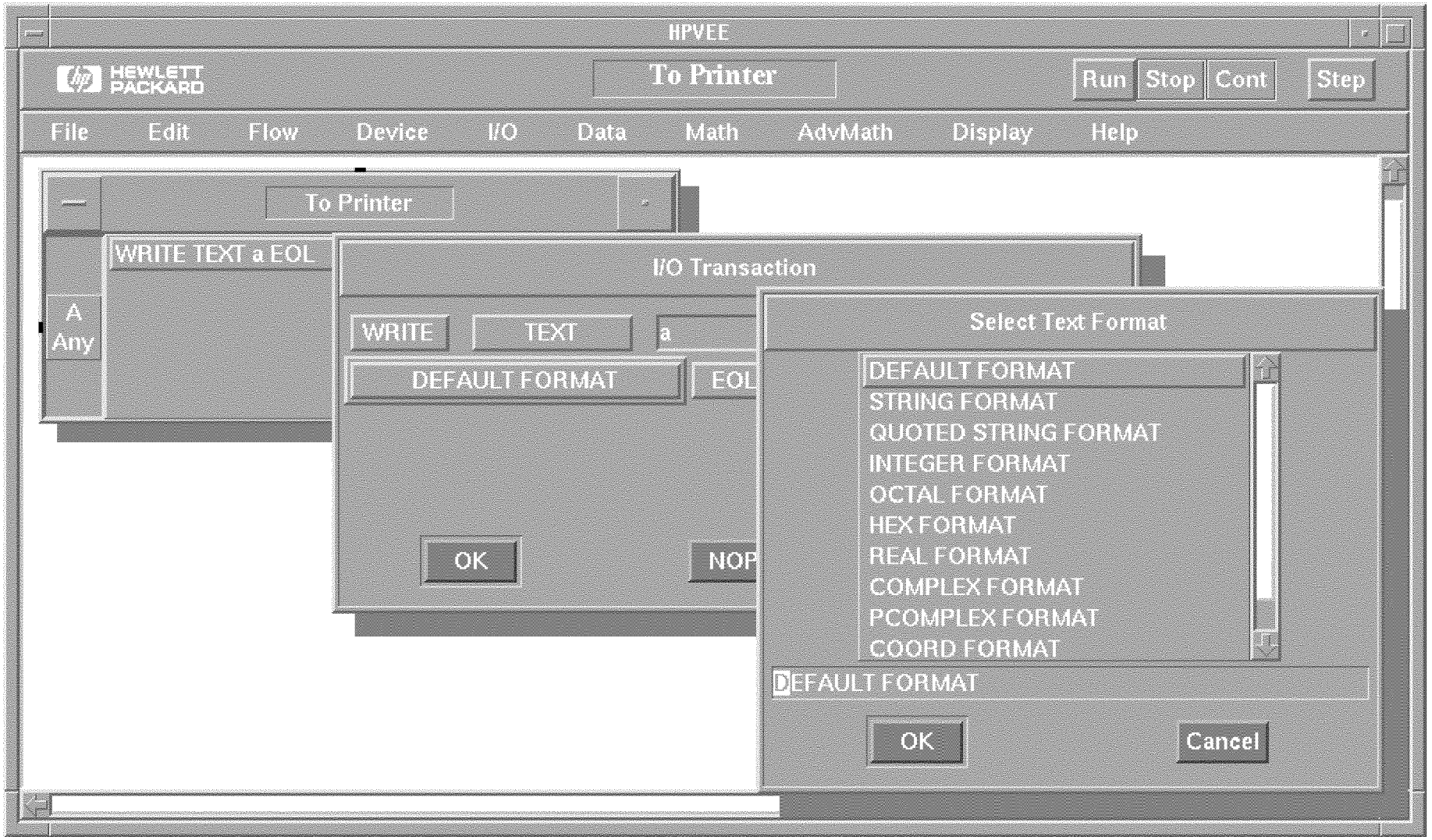

VeeLaser
HEWLETT PACKARD
Sieve of Erastosthenes
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Max Tested
100
sin(
A/2+1
2 to A/2+1
"Wrong Way"
What BYTE wrote in C and BASIC
3 to Max by 2
sin(
A mod B !=0
Gate
# of Primes Found
24
Zero?
Timer
19.23
Break

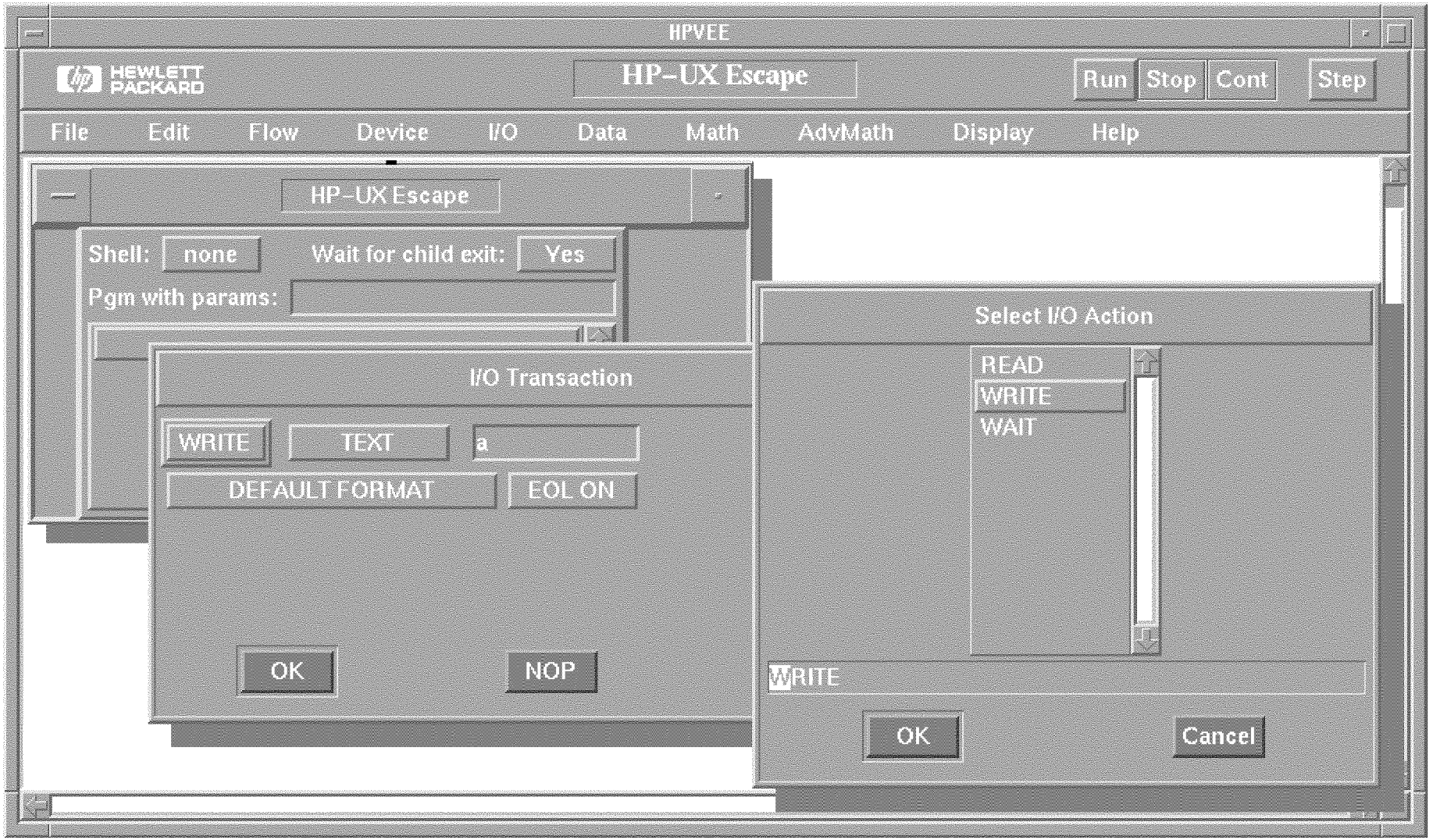

HPVEE
HEWLETT PACKARD
Sliding Collector
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
For Range
From 1
Thru 100
Step 1
Sliding Collector
Data Any
Array Size 10
Trigger Every 85
Array
Logging AlphaNumeric
76
77
78
79
80
81
82
83
84
85

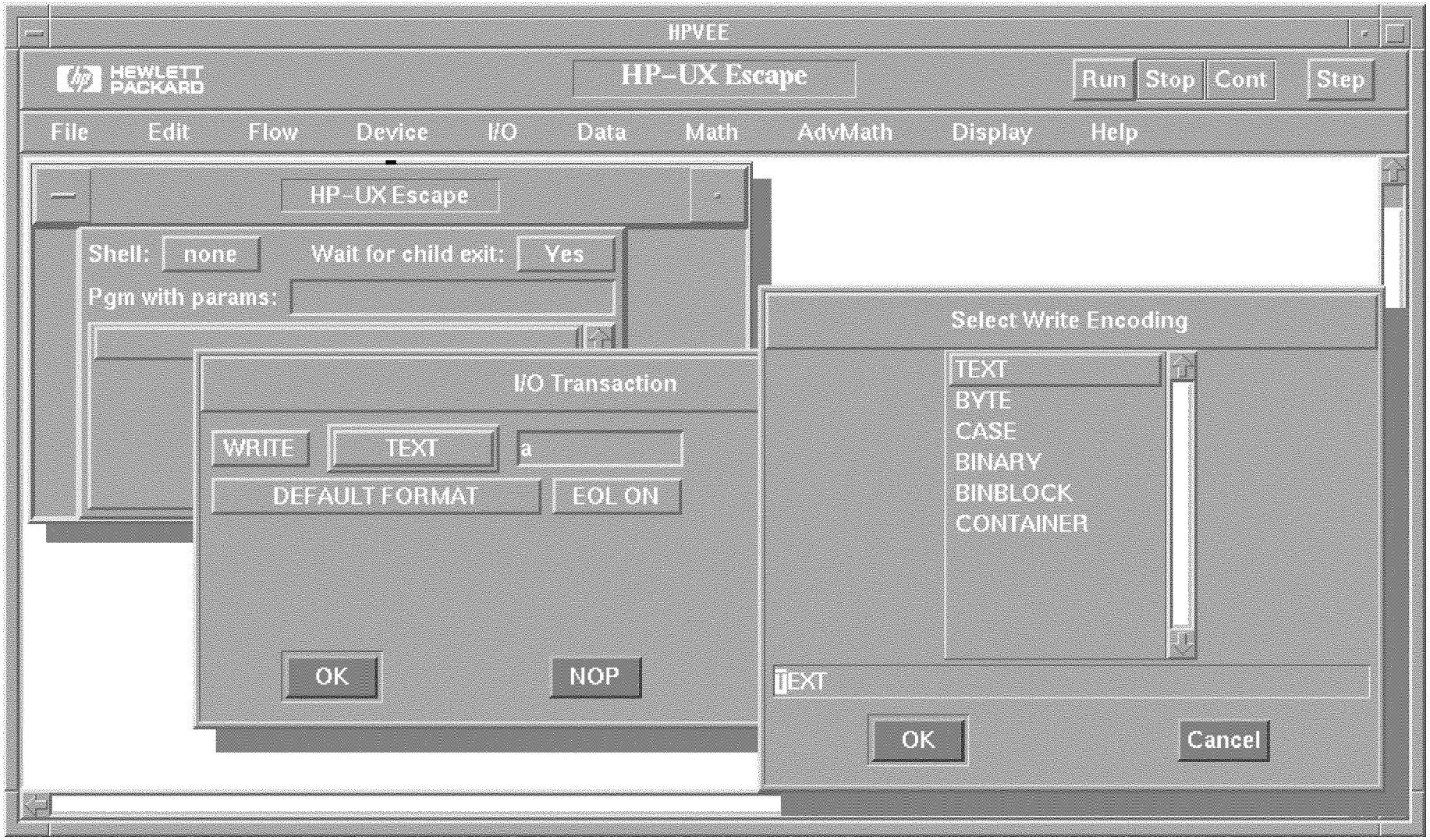

HPVEE
HEWLETT PACKARD
To/From HP BASIC/UX
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Init HP BASIC/UX
Program:
AUTOST
To/From HP BASIC/UX
Write Pipe
/tmp/to_rmb
Read Pipe
/tmp/from_rmb
WRITE TEXT a EOL
READ TEXT x REAL COUNT:1
A
Any
X

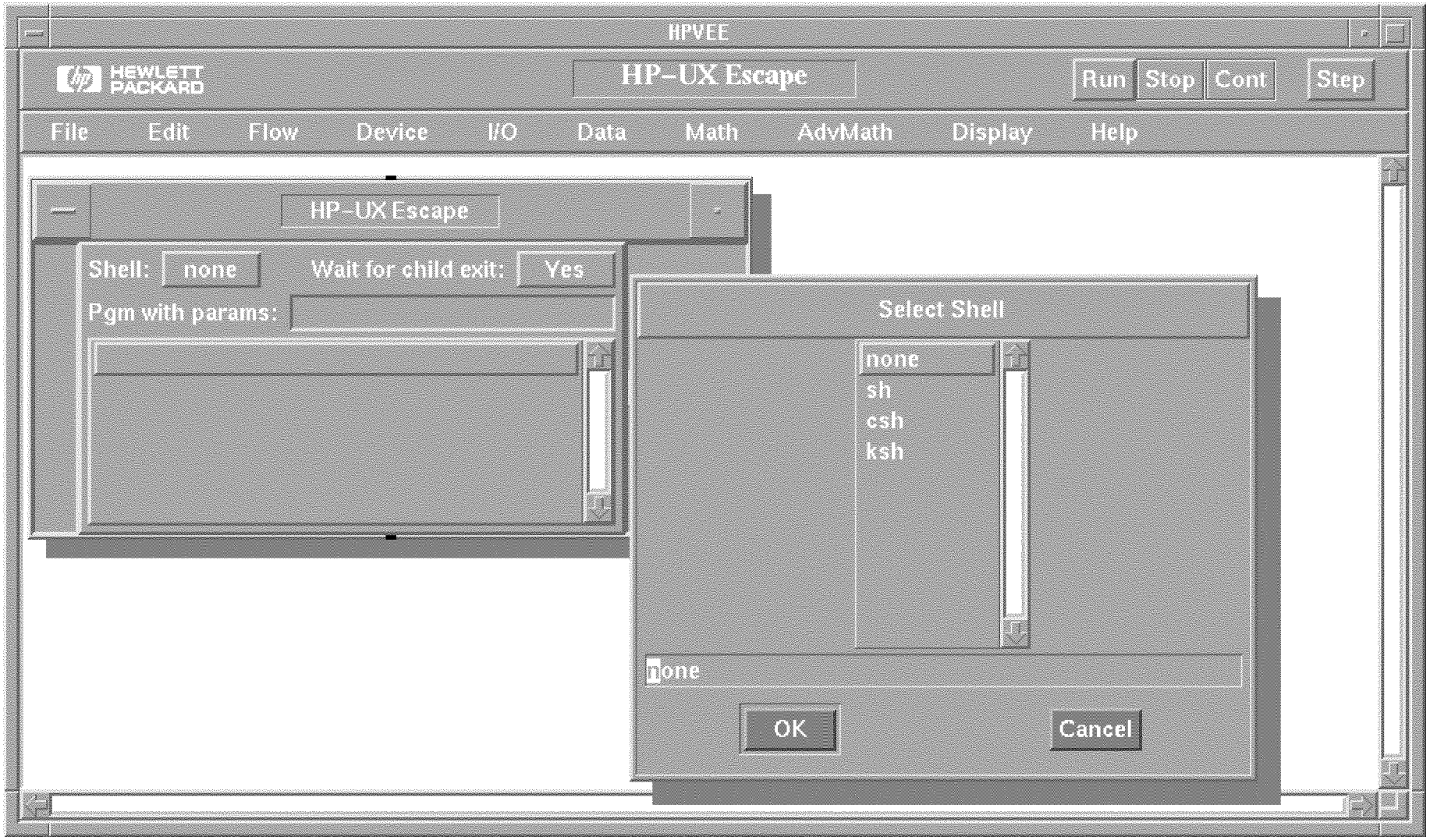

HPVEE
HEWLETT PACKARD
Top Down Design
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
Task 1
Task 1-A
Task 1-A-1
Task 1-A-2
Task 1-B
Task 1-B-1
Task 1-B-2

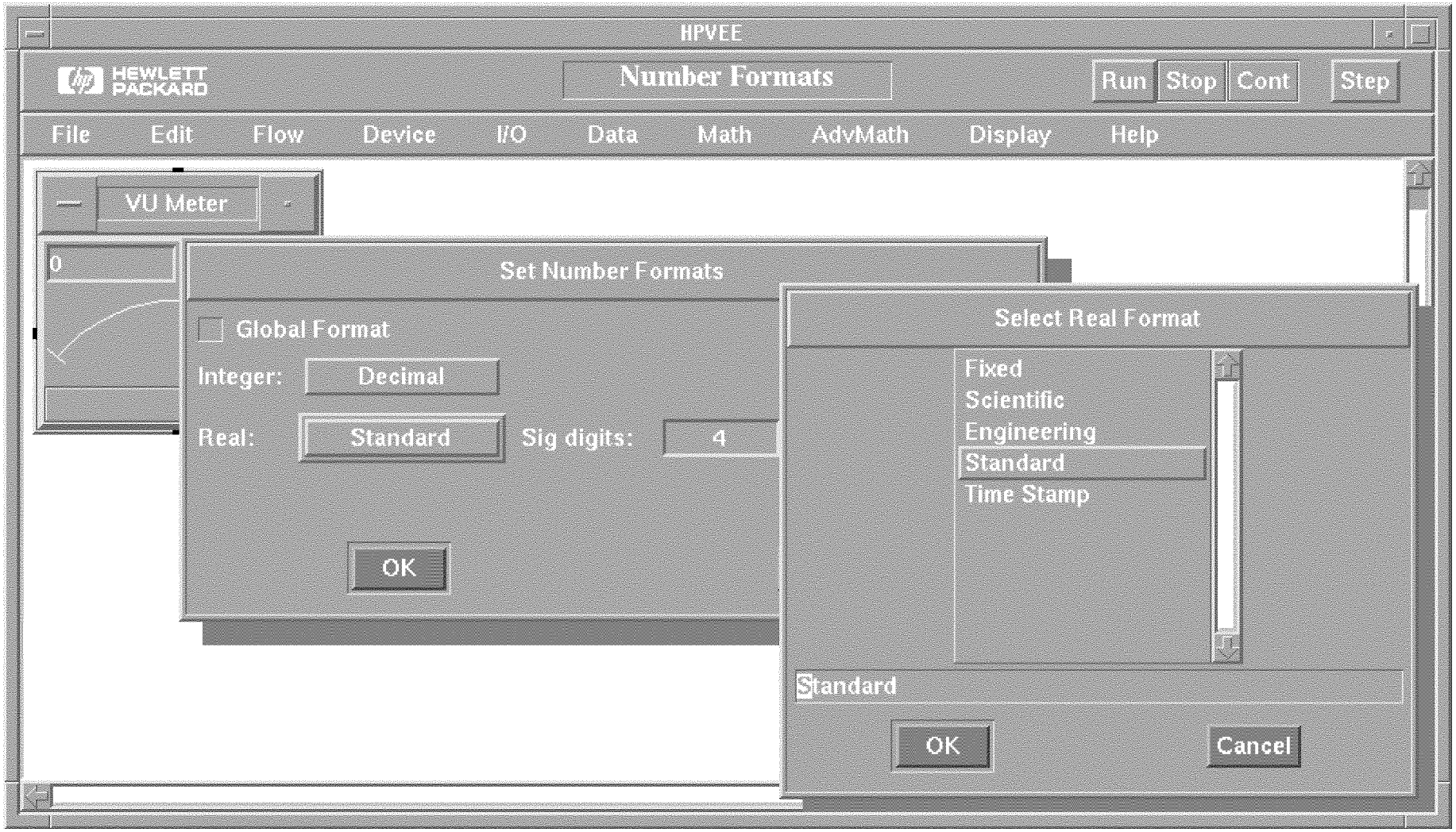

HPVEE
HEWLETT PACKARD
To Printer
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
To Printer
WRITE TEXT a EOL
A
Any
I/O Transaction
WRITE
TEXT
a
DEFAULT FORMAT
EOL ON
OK
NOP
Cancel

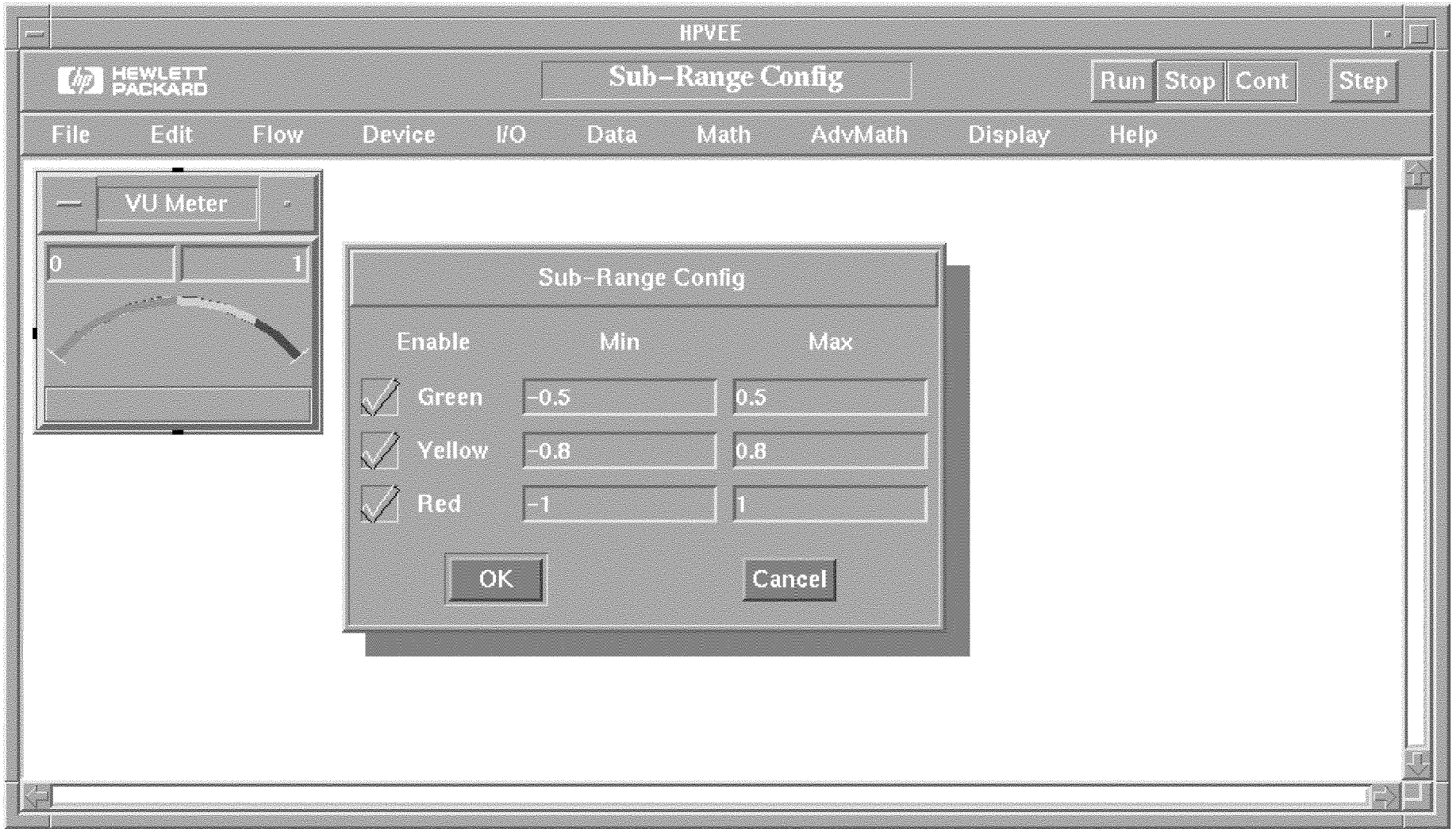

HPVEE
HEWLETT PACKARD
To Printer
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
To Printer
WRITE TEXT a EOL
A
Any
I/O Transaction
WRITE
TEXT
a
DEFAULT FORMAT
EOL
OK
NOP
Select Text Format
DEFAULT FORMAT
STRING FORMAT
QUOTED STRING FORMAT
INTEGER FORMAT
OCTAL FORMAT
HEX FORMAT
REAL FORMAT
COMPLEX FORMAT
PCOMPLEX FORMAT
COORD FORMAT
DEFAULT FORMAT
OK
Cancel


HPVEE
HEWLETT PACKARD
HP-UX Escape
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
HP-UX Escape
Shell:
none
Wait for child exit:
Yes
Pgm with params:
I/O Transaction
WRITE
TEXT
a
DEFAULT FORMAT
EOL ON
OK
NOP
Select I/O Action
READ
WRITE
WAIT
WRITE
OK
Cancel


HPVEE
HEWLETT PACKARD
HP-UX Escape
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
HP-UX Escape
Shell:
none
Wait for child exit:
Yes
Pgm with params:
I/O Transaction
WRITE
TEXT
a
DEFAULT FORMAT
EOL ON
OK
NOP
Select Write Encoding
TEXT
BYTE
CASE
BINARY
BINBLOCK
CONTAINER
TEXT
OK
Cancel


HPVEE
HEWLETT PACKARD
HP-UX Escape
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
HP-UX Escape
Shell:
none
Wait for child exit:
Yes
Pgm with params:
Select Shell
none
sh
csh
ksh
none
OK
Cancel


HPVEE
HEWLETT PACKARD
Number Formats
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
VU Meter
0
Set Number Formats
Global Format
Integer:
Decimal
Real:
Standard
Sig digits:
4
OK
Select Real Format
Fixed
Scientific
Engineering
Standard
Time Stamp
Standard
OK
Cancel


HPVEE
HEWLETT PACKARD
Sub-Range Config
Run
Stop
Cont
Step
File
Edit
Flow
Device
I/O
Data
Math
AdvMath
Display
Help
VU Meter
0
1
Sub-Range Config
Enable
Min
Max
Green
-0.5
0.5
Yellow
-0.8
0.8
Red
-1
1
OK
Cancel