How to use PTestDif.exe

When PTestDif.exe starts, the form (shown in Figure 1) will appear.
Set the data values in the string grid component as shown in Figure 2.

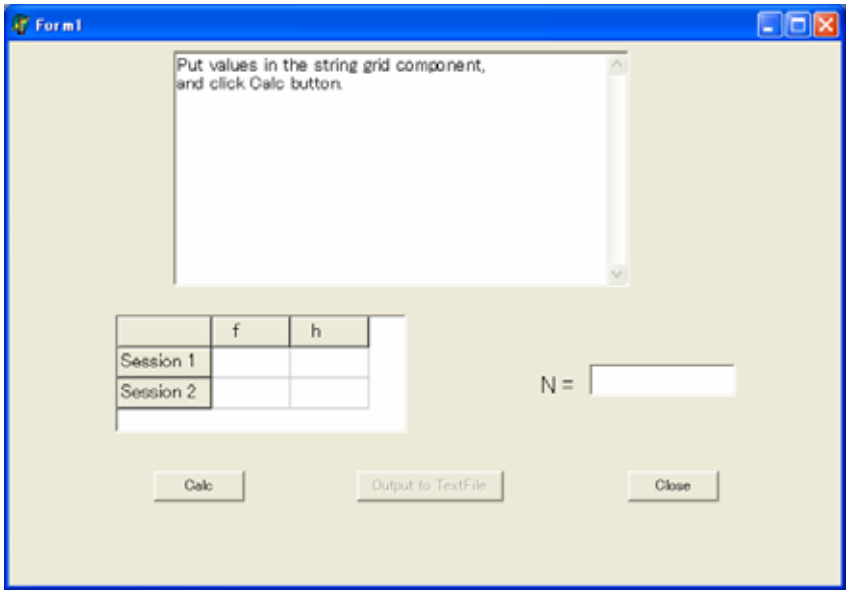

Figure 1. The form presented at the start of the program.

In Figure 2, the data of example 11.6 are set. After the data are set, click Calc button,

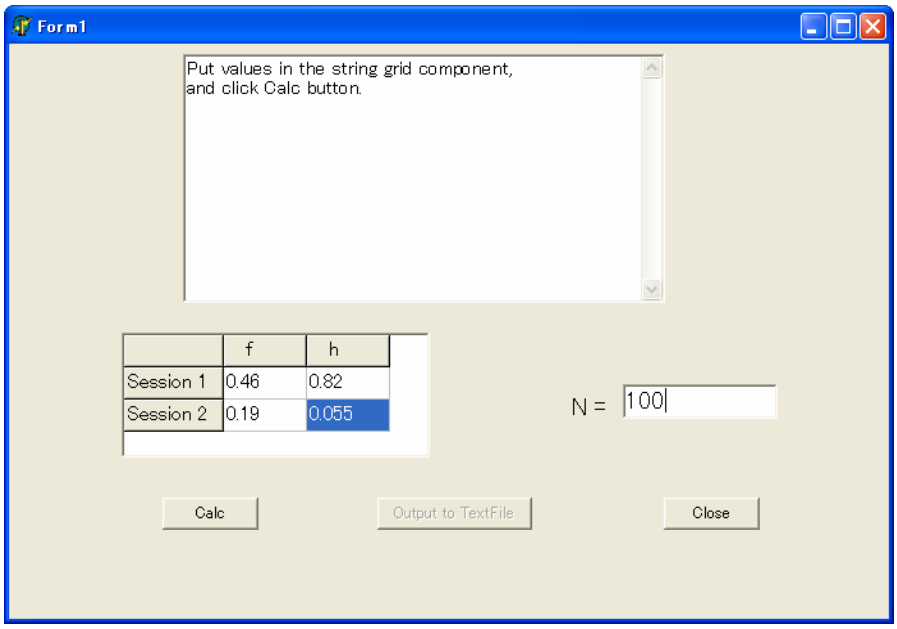

Figure 2. Values set in the string grid component.

then the calculation begins. Results of the calculation will be displayed in the memo

component (Figure 3).

The results shown in the memo component can be output to a text file by clicking

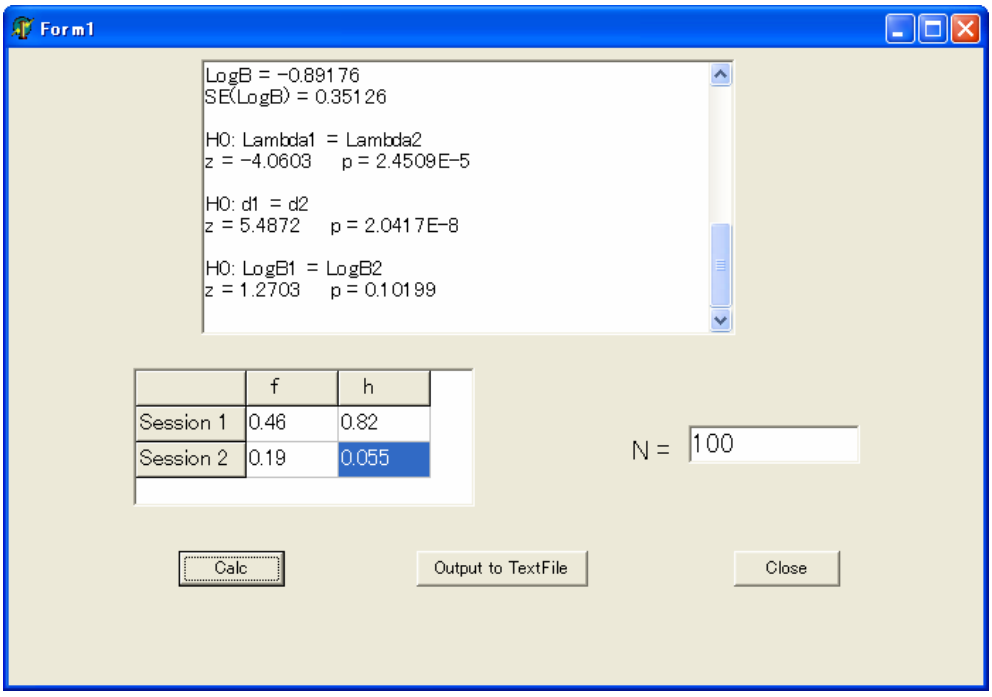

Figure 3. Results of calculation shown in the memo component.

“Output to TextFile” button. List 1 shows the content of the text file, in which the result of Figure 3 are stored.

In the list, the following

Lambda = 0.10043
SE(Lambda) = 0.12556
d' = 1.0158
SE(d') = 0.19288
LogB = -0.4139
and
SE(LogB) = 0.13461

mean that

List 1. Content of the text file.

```
N = 100

Session 1...
f = 0.46
h = 0.82
Lambda = 0.10043
SE(Lambda) = 0.12556
d' = 1.0158
SE(d') = 0.19288
LogB = -0.4139
SE(LogB) = 0.13461

Session 2...
f = 0.19
h = 0.055
Lambda = 0.8779
SE(Lambda) = 0.14457
d' = -0.7203
SE(d') = 0.2508
LogB = -0.89176
SE(LogB) = 0.35126

H0: Lambda1 = Lambda2
z = -4.0603       p = 2.4509E-5

H0: d1 = d2
z = 5.4872       p = 2.0417E-8

H0: LogB1 = LogB2
z = 1.2703       p = 0.10199
```

$\lambda = 0.10043$

$se\langle\lambda\rangle = 0.12556$

$d' = 1.0158$

$se\langle d'\rangle = 0.19288$

$\log\beta = -0.4139$

and

$se\langle\log\beta\rangle = 0.13461$

The following

H0: Lambda1 = Lambda2

and

z = -4.0603 p = 2.4509E-5

mean that

for the null hypothesis $H_0 : \lambda_1 = \lambda_2$,

$z = -4.0603$ with p-value 2.4509×10^{-5}

Likewise,

H0: d1 = d2

and

z = 5.4872 p = 2.0417E-8

mean that

for the null hypothesis $H_0 : d_1' = d_2'$,

$z = 5.4872$ with p-value 2.0417×10^{-8}

Similarly,

H0: LogB1 = LogB2

z = 1.2703 p = 0.10199

mean that

for the null hypothesis $H_0 : \log\beta_1 = \log\beta_2$,

$z = 1.2703$ with p-value 0.10199