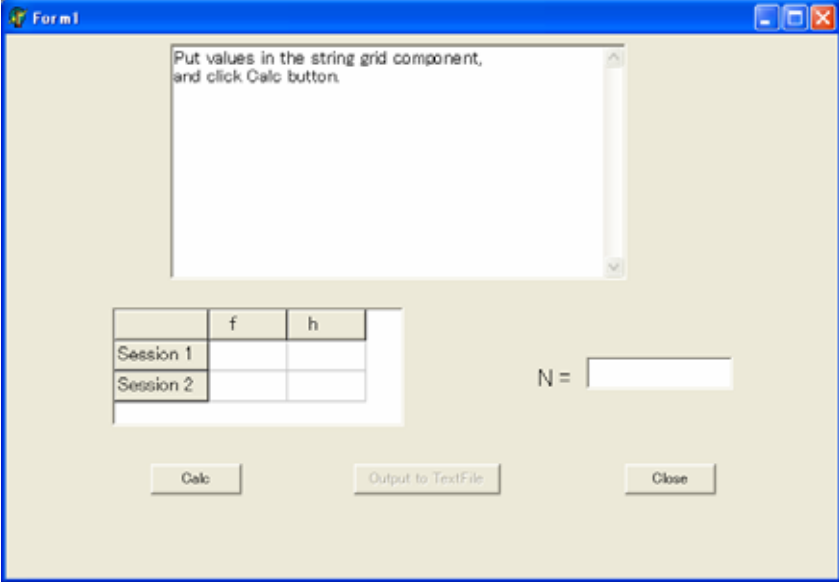


How to use PTestDif.exe

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.



Put values in the string grid component, and click Calc button.

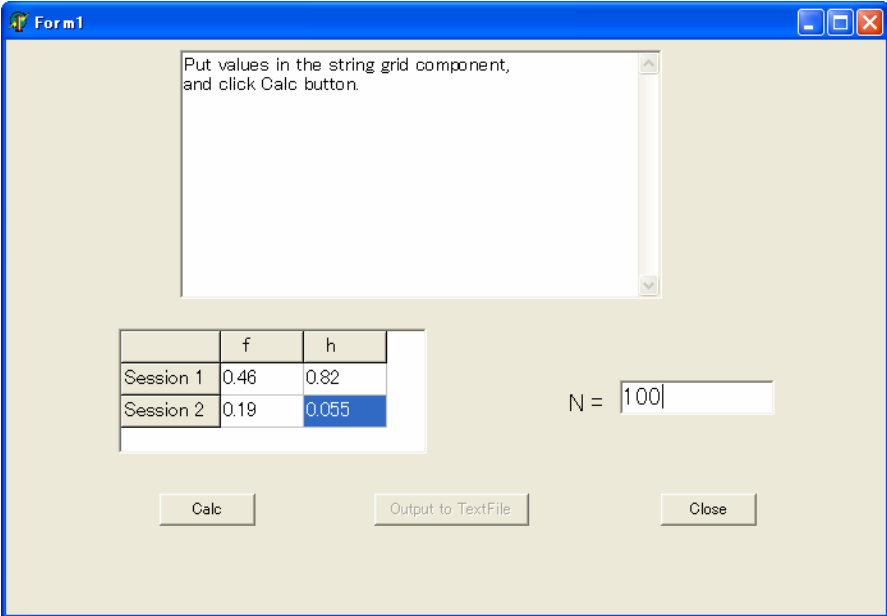
	f	h
Session 1		
Session 2		

N =

Calc Output to TextFile Close

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,



Put values in the string grid component, and click Calc button.

	f	h
Session 1	0.46	0.82
Session 2	0.19	0.055

N =

Calc Output to TextFile Close

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

The screenshot shows a software window titled "Form1" with a blue title bar. Inside, a memo component displays the following text:

```
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
```

Below the memo is a table with two columns, 'f' and 'h', and two rows:

	f	h
Session 1	0.46	0.82
Session 2	0.19	0.055

To the right of the table is a label "N =" followed by a text box containing the value "100". At the bottom of the window are three buttons: "Calc", "Output to TextFile", and "Close".

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

$$H_0: \text{Lambda1} = \text{Lambda2}$$

and

$$z = -4.0603 \quad p = 2.4509\text{E-}5$$

mean that

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

$$z = -4.0603 \text{ with p-value } 2.4509 \times 10^{-5}$$

Likewise,

$$H_0: d1 = d2$$

and

$$z = 5.4872 \quad p = 2.0417\text{E-}8$$

mean that

$$\text{for the null hypothesis } H_0 : d'_1 = d'_2 ,$$

$$z = 5.4872 \text{ with p-value } 2.0417 \times 10^{-8}$$

Similarly,

$$H_0: \text{LogB1} = \text{LogB2}$$

$$z = 1.2703 \quad p = 0.10199$$

mean that

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

$$z = 1.2703 \text{ with p-value } 0.10199$$