```
aaa > BB
This is STtest definition:
>{STtest} struct =>
    \{X\} => \{X - default\}
     \{Y\} = \{Y - default\}
>
     \{SS\} struct =>
       {Z} => {SS Z-default}
       \{Zx\} \ => \ \{SS \ Zx\text{-default}\}
       \{YY\} => \{YY\text{-default}\}
       {ZsX} struct =>
          {ZsXa} => {SS ZsX ZsXa-default}
          {Zsxb} = {SS ZsX ZsXb-default}
       \{TTy\} struct =>
          \{TTyZsXa\} => \{TTyTT-ZsXa-default\}
          \{TTyZsxb\} => \{TTyTT-ZsXb-default\}
          {Z} => {TTy-Z-default}
    \{TT\} struct =>
       \{Z\} => \{TT Z-default\}
       \{Zx\} = \{TT Zx\text{-default}\}
>
       \{ZX\} struct =>
          \{ZXa\} = \{TT Zx ZXa\text{-default}\}
          \{Zxb\} \ => \ \{TT \ Zx \ ZXb\text{-default}\}
These are STtest terms:
>{STtest[1]} (idx: A) =>
    \begin{array}{ll} \{X\} & => & \{X\text{-default}\} \\ \{Y\} & => & \{Y\text{-default}\} \end{array} 
     {SS[1]} (idx: A) =>
       \left\{Z\right\} \ => \ \left\{SS \ Z\text{-default}\right\}
       \{Zx\} \ => \ \{SS \ Zx\text{-default}\}
>{STtest[hah]} (idx: A) =>
     \begin{array}{ll} \{X\} & => & \{X\text{-default}\} \\ \{Y\} & => & \{Y\text{-default}\} \end{array} 
     {SS[1]} (idx: A) =>
       \{Z\} \ => \ \{SS \ Z\text{-default}\}
       \{Zx\} = \{SS \ Zx\text{-default}\}
>{STtest[2]} (idx: B) =>
> \{X\} => \{X\text{-default}\}
> \{Y\} => \{Y\text{-default}\}
This is 'X' property from ST test[hah]'hah' term: X-default
new1X
new2X
new1X
ST1.SS1.Z it's there and it's value is:newZ
ST1.SS1.ZX it isn't there
ST1.SS2.Z it's there and it's value is:SS Z-default
ST1.SS3.Z it isn't there
```

```
Nterms:2..2
xx:2
BBBBBBBBBBBBBBBBBB
CCCCCCCCCCCCCCC
it worked!
>{STtest} struct =>
   \{X\} = \{X - default\}
   \{Y\} => \{Y\text{-default}\}
   {SS} struct =>
      \{\hat{\mathbf{Z}}\} => \{SS \text{ Z-default}\}
      \{Zx\} => \{SS Zx-default\}
      \{YY\} => \{YY\text{-default}\}
      \{ZsX\} struct =>
        {ZsXa} => {SS ZsX ZsXa-default}
        {Zsxb} = {SS ZsX ZsXb-default}
      \{TTy\}  struct =>
        \{TTyZsXa\} => \{TTyTT-ZsXa-default\}
        \{TTyZsxb\} = \{TTyTT-ZsXb-default\}
>
   >
>
      \{Z\} \ => \ \{TT \ Z\text{-default}\}
>
      \{Zx\} => \{TT Zx\text{-default}\}
      \{ZX\} struct =>
        {ZXa} => {TT Zx ZXa-default}
        {Zxb} => {TT Zx ZXb-default}
>{STtest[1]} (idx: A) =>
   \{X\} => \{new1X\}
   \{Y\} => \{Y\text{-default}\}
   {SS[1]} (idx: A) =>
     \{Z\} => \{newZ\}
      \{Zx\} => \{SS Zx-default\}
   {SS[2]} (idx: B) =>
      {Z} => {SS Z-default}
      \{Zx\} => \{SS Zx-default\}
>
      \{YY\} \ => \ \{YY\text{-default}\}
>{STtest[hah]} (idx: A) =>
   {X} => {new1X}
   \{Y\} = \{Y - \text{default}\}
   \{SS[1]\}\ (idx:\ A) =>
      \{Z\} => \{newZ\}
      \{Zx\} = \{SS \ Zx\text{-default}\}
   \{SS[2]\}\ (idx:\ \tilde{B})\ =>
      \{Z\} => \{SS Z - default\}
      {Zx} => {SS Zx-default}
      \{YY\} => \{YY\text{-default}\}
```

```
>{STtest[2]} (idx: B) =>
      \begin{array}{ll} \{X\} & => & \{new2X\} \\ \{Y\} & => & \{Y\text{-default}\} \end{array} 
     \{SS[1]\}\ (idx:\ A) =>
       \{Z\} \ => \ \{SS \ Z\text{-default}\}
        \{Zx\} \ => \ \{SS \ Zx\text{-default}\}
        \{YY\} => \{YY\text{-default}\}
     \{TT[1]\}\ (idx:\ A) =>
        \{Z\} => \{TT Z\text{-default}\}
        \{Zx\} \ => \ \{TT \ Zx\text{-default}\}
        \{ZX[1]\}\ (idx:\ A) =>
          {ZXa} = {TT Zx ZXa-default} 
{Zxb} = {TT Zx ZXb-default}
        \{ZX[2]\}\ (idx:\ B)\ =>
          {ZXa} => {TT Zx ZXa-default}
           {Zxb} => {TT Zx ZXb-default}
>{STtest} struct =>
     \{X\} => \{X\text{-default}\}
     \{Y\} => \{Y\text{-default}\}
     \{SS\} struct =>
        \{Z\} => \{SS Z - default\}
        \{Zx\} \ => \ \{SS \ Zx\text{-default}\}
        \{YY\} => \{YY\text{-default}\}
        \{ZsX\} struct =>
          \{ZsXa\} \ => \ \{SS \ ZsX \ ZsXa\text{-default}\}
           {Zsxb} = {SS ZsX ZsXb-default}
        \{TTy\}\ struct\ =>
           \{TTyZsXa\} => \{TTyTT-ZsXa-default\}
           \{TTyZsxb\} => \{TTyTT-ZsXb-default\}
>
           {Z} => {TTy-Z-default}
     \{TT\} struct =>
       \{Z\} => \{TT Z\text{-default}\}
        {Zx} => {TT Zx-default}
        \{ZX\} struct =>
           \begin{array}{lll} \{ZXa\} & => & \{TT \ Zx \ ZXa\text{-default}\} \\ \{Zxb\} & => & \{TT \ Zx \ ZXb\text{-default}\} \end{array} 
>{STtest[1]} (idx: A) =>
     \{X\} \ => \ \{new1X\}
     \{Y\} = \{Y - default\}
     \{SS[1]\}\ (idx:\ A) =>
        \{Z\} \ => \ \{newZ\}
        \{Zx\} = \{SS \ Zx\text{-default}\}
     \{SS[2]\}\ (idx:\ \hat{B})\ =>
        \{Z\} \ => \ \{SS \ Z\text{-default}\}
        {Zx} => {SS Zx-default}
       \{YY\} => \{YY\text{-default}\}
```

```
>{STtest[hah]} (idx: A) =>
   \{X\} => \{\text{new}1X\}
   \{Y\} = \{Y - default\}
   \{SS[1]\}\ (idx:\ A) =>
     \{Z\} \ => \ \{newZ\}
>
     {Zx} => {SS Zx-default}
   {SS[2]} (idx: B) =>
     \{Z\} \ => \ \{SS \ Z\text{-default}\}
     \{Zx\} => \{SS Zx-default\}
     \{YY\} => \{YY\text{-default}\}
>{STtest[2]} (idx: B) =>
   \begin{array}{ll} \{X\} & => & \{new2X\} \\ \{Y\} & => & \{Y\text{-default}\} \end{array}
   {SS[1]} (idx: A) =>
     {Z} => {SS Z-default}
     \{Zx\} => \{SS Zx-default\}
>
     \{YY\} => \{YY\text{-default}\}
   \{TT[1]\}\ (idx:\ \dot{A})\ =>
     \{Z\} => \{TT Z - default\}
>
     \{Zx\} = \{TTZx-default\}
>
     \{ZX[1]\}\ (idx:\ A) =>
       \{ZXa\} \ => \ \{TT \ Zx \ ZXa\text{-default}\}
>
        {Zxb} = {TT Zx ZXb-default}
     \{ZX[2]\} (idx: B) =>
       {ZXa} => {TT Zx ZXa-default}
>
       \{Zxb\} => \{TT Zx ZXb-default\}
==>AA : BB : CC : DD : EE : FF<==:: 2::
==>AA:BB:CC:DD:EE:FF<==::1::AA
==>AA:BB:CC:DD:EE:FF<==::0::AA
«end»
==>AA:BB:CC:DD:EE:FF<==::0::BB
==>AA:BB:CC:DD:EE:FF<==::0::CC
«end»
==>AA:BB:CC:DD:EE:FF<==::0::DD
«end»
==>AA:BB:CC:DD:EE:FF<==::0::EE
«end»
==>AA:BB:CC:DD:EE:FF<==::0::FF
==>AA:BB:CC:DD:EE:FF<==::1::BB
==>AA:BB:CC:DD:EE:FF<==::0::AA
«end»
==>AA:BB:CC:DD:EE:FF<==::0::BB
«end»
==>AA:BB:CC:DD:EE:FF<==::0::CC
```

```
«end»
==>AA:BB:CC:DD:EE:FF<==::0::DD
«end»
==>AA:BB:CC:DD:EE:FF<==::0::EE
«end»
==>AA:BB:CC:DD:EE:FF<==::0::FF
«end»
==>AA : BB : CC : DD : EE : FF<==:: 1::CC
==>AA:BB:CC:DD:EE:FF<==::0::AA
==>AA:BB:CC:DD:EE:FF<==::0::BB
«end»
==>AA:BB:CC:DD:EE:FF<==::0::CC
«end»
==>AA:BB:CC:DD:EE:FF<==::0::DD
==>AA:BB:CC:DD:EE:FF<==::0::EE
«end»
==>AA:BB:CC:DD:EE:FF<==::0::FF
==>AA:BB:CC:DD:EE:FF<==::1::DD
==>AA:BB:CC:DD:EE:FF<==::0::AA
«end»
==>AA:BB:CC:DD:EE:FF<==::0::BB
«end»
==>AA:BB:CC:DD:EE:FF<==::0::CC
«end»
==>AA:BB:CC:DD:EE:FF<==::0::DD
«end»
==>AA:BB:CC:DD:EE:FF<==::0::EE
«end»
==>AA:BB:CC:DD:EE:FF<==::0::FF
«end»
==>AA:BB:CC:DD:EE:FF<==::1::EE
==>AA:BB:CC:DD:EE:FF<==::0::AA
«end»
==>AA:BB:CC:DD:EE:FF<==::0::BB
«end»
==>AA:BB:CC:DD:EE:FF<==::0::CC
==>AA:BB:CC:DD:EE:FF<==::0::DD
«end»
==>AA:BB:CC:DD:EE:FF<==::0::EE
«end»
==>AA:BB:CC:DD:EE:FF<==::0::FF
«end»
```

```
==>AA : BB : CC : DD : EE : FF<==:: 1::FF

==>AA : BB : CC : DD : EE : FF<==:: 0::AA

«end»

==>AA : BB : CC : DD : EE : FF<==:: 0::BB

«end»

==>AA : BB : CC : DD : EE : FF<==:: 0::CC

«end»

==>AA : BB : CC : DD : EE : FF<==:: 0::DD

«end»

==>AA : BB : CC : DD : EE : FF<==:: 0::EE

«end»

==>AA : BB : CC : DD : EE : FF<==:: 0::EE

«end»

==>AA : BB : CC : DD : EE : FF<==:: 0::EE
```