```
passed: myfoo not defined
Testing starray
     — properties/sub-structures, one definition at a time —
   STtest
   passed: dup detected
   STtestX
   passed: new done!
   adding struct ZX to STtest.TT
   passed: defined correctly!
   STtest.TT Zy=TT Zy-default
   passed
   STtest.TTT Zy(err)=TT Zy-default
   passed: err detected
     — Extending def structure of an already instantiated starray —
        Note: it will loop if not fixed!
     — Fixing it —
        Note: STtest def \show shall appear in logs (if fixed)
        Note: STtest terms \show shall appear in logs (if fixed)
        Note: STtest.SSX (err/warning) shall be in logs:
     — testing term syntax function —
   STtest.TT.ZXx (err)
   passed: err detected
   STtest.TT.ZX (correct)
   passed
     — Texting expandable predicates and command —
   passed: myfoo isn't defined
   passed: myfoo isn't defined
   passed: STtest.TT.ZX is a starray
   executing term syntax:n (no output)
   This is ZXa: «TT Zx ZXa-default» (using 'parsed' one)
     — expandable cnt/iter commands —
   The current cnt:2(using 'parsed' one)
   passed: cnt isn't 0
   The current iter:2(using 'parsed' one)
   passed: iter is 2
   passed: myfoo not a prop of
   passed: ZXa is prop
   passed: ZXa is true
     — Texting expandable predicates and command with parsed ref
variables —
```

```
executing term syntax:nNN (no output refB)
   This is ZXa: «TT Zx ZXa-default» (using 'refA' one)
     — expandable cnt/iter commands —
   The current cnt:2(using 'refA' one)
   passed: cnt isn't 0
   The current iter:1(using 'refB' one)
   passed: iter is 1
   The current iter:2(using 'refA' one)
   passed: iter is 2
   (using refA):
   passed: myfoo not a prop of
   (using refA):
   passed: ZXa is prop
   (using refB):
   passed: ZXa wasn't found
   passed: ZXa is true
     — testing get prop functions —
        Note: This is (default) 'X' property from ST test[hah] term:
   X-default
        Note: Same with a token-list variable
   X-default
        Note: Same with 'branching'
   X:X-default
   passed: X found correctly
   Xt:
   passed: Xt don't exist
        Note: (same) testing \setminus...if in:
   passed: X exists
   passed: Xty don't exit
     — Testing iter functions —
   Current STtest iter:
        Note: direct access:2
        Note: using a tmp var:2
        Note: reseting iter
   iter:1
        Note: next iter
   iter:2
        Note: next iter
   iter:2
        Note: set iter hash
   iter:1
        Note: set iter->5
   iter:2
        Note: set iter->0
```

executing term syntax:nNN (no output refA)

```
iter:1
```

```
— Testing iter functions with branching —
Current STtest iter:
passed: got: 1
iter from STtestY (err):
passed: syntax err OK
     Note: reseting iter
passed
iter:1
     Note: next iter
passed
iter:2
     Note: next iter
passed: 'saturated'
iter:2
     Note: set iter hash
passed: hash found
iter:1
     Note: set iter->5
passed: 'over'
iter:2
     Note: set iter->0
passed: 'under'
iter:1
     Note: set iter->2
passed
iter:2
  — Testing cnt functions —
Current STtest cnt:
     Note: direct access:2
     Note: using a tmp var:2
  — Testing cnt function with branching —
Current STtest cnt:
passed: got: 2
Current STtestX cnt:
passed: got: 0
Current STtestY cnt:
passed: non existant
  — Testing _if_in function —
passed: X found
passed: G not found
  — Testing _term_syntax function —
STtest[2].TT is:
passed: correct
STtest[1].TT is:
passed: wasn't instantiated
STtest[1].GG is:
passed: not correct
  — Testing (g)set_prop functions —
STtest[2].TT.Z current value: TT Z-default
STtest[2].TT.Z new value: newZ value
  — Testing (g)set_prop inside a group —
STtest[2].TT.Z inside: newZ inside group
STtest[2].TT.Z ouside: newZ value
STtest[2].TT.Z inside gset: newZ gset inside group
STtest[2].TT.Z ouside: newZ gset inside group
```

```
— Testing (g)set prop functions —
STtest[2].TT.Z current value: newZ gset inside group
STtest[2].TT.Z new value: newZ value
  — Testing (g)set prop inside a group —
STtest[2].TT.Z inside: newZ inside group
STtest[2].TT.Z ouside: newZ value
STtest[2].TT.Z inside gset: newZ gset inside group
STtest[2].TT.Z ouside: newZ gset inside group
  — Testing (g)set_prop functions with branching —
STtest[2].TT.Z current value: newZ gset inside group
passed: new value: newZZZZ value
 — Testing (g)set_prop inside a group —
passed: new value: newZ inside group
STtest[2].TT.Z ouside: newZZZZ value
passed: new value: newZ gset inside group
STtest[2].TT.Z ouside: newZ gset inside group
setting:STtest[1].TT (err, not instantiated)
passed: correct, no instance
 — set prop:nnV inserting a sequence as a property —
     Note: the 2 (equal) sequences shall be in log (\show)
 — defining/setting from keyval —
 — setting from keyval with branching —
passed: correct
  — setting from keyval with branching II —
passed: correct
student definition:
>{student} struct =>
    \{first\} => \{-first-\}
    \{last\} => \{-last-\}
    \{name\} => \{-full-name-\}
    \{article\} => \{o(a)\}
    \{\text{narticle}\} => \{(a)\}
    {Article} => {O(A)}
    {\text{Narticle}} => {(A)}
>
    \{Nproc\} => \{--\}
    {ID} => {--}
>
>
    \{\text{email}\} => \{--\}
    \{advisor\}\ struct =>
>
      \{first\} => \{-first-\}
>
      \{last\} => \{-last-\}
>
      \{name\} => \{-full-name-\}
>
      \{article\} => \{o(a)\}
>
      \{\text{narticle}\} => \{(a)\}
      \{Article\} => \{O(A)\}
      {Narticle} => {(A)}
      \{institution\} => \{-inst-\}
      \{titleinfo\} => \{-info-\}
      \{\text{email}\} => \{--\}
      \{\text{phone}\} => \{--\}
      {somedata} struct =>
         \{ fieldA \} => \{ field-Ax \}
         {fieldB} => {field-B}
         \{fieldC\} => \{field-C\}
        {fieldD} => {field-D}
    {reviewers} struct =>
```

```
\{first\} => \{-first-\}
   >
           \{last\} => \{-last-\}
    >
           \{name\} => \{-full-name-\}
           \{article\} => \{o(a)\}
           \{\text{narticle}\} => \{(a)\}
           \{Article\} => \{O(A)\}
           {\text{Narticle}} => \{(A)\}
           \{institution\} => \{-inst-\}
           \{titleinfo\} => \{-info-\}
           \{email\} => \{--\}
           \{phone\} => \{--\}
student current terms:
    >{student[1]} (idx: A) =>
        \{first\} => \{first name\}
        {last} => {last name}
   >
   >
       \{name\} => \{-full-name-\}
       \{article\} => \{o(a)\}
        \{\text{narticle}\} => \{(a)\}
        {Article} => {O(A)}
        {\text{Narticle}} => \{(A)\}
   >
        {Nproc} => {—}
{ID} => {—}
   >
   >
        \{\text{email}\} => \{\}
   >
   >
        \{advisor[1]\}\ (idx:\ A) =>
   >
           \{first\} = \{advisorA first name\}
   >
           \{last\} = \{advisorA \ last \ name\}
   >
           \{name\} => \{-full-name-\}
    >
           \{article\} => \{o(a)\}
    >
           {\text{narticle}} => {(a)}
           {Article} => {O(A)}
    >
    >
           {Narticle} => {(A)}
    >
           \{institution\} => \{-inst-\}
    >
           \{ \text{titleinfo} \} => \{ -\text{info} - \} 
           \{\text{email}\} => \{--\}
   >
>
>
           \{\text{phone}\} => \{--\}
           \{somedata[1]\}\ (idx:\ A) =>
   >
             \{fieldA\} => \{field-Ax\}
   >
>
              \{ fieldB \} => \{ field-B \}
              \{ fieldC \} => \{ field-C \}
   >
             {fieldD} => {field-D}
    >
        \{advisor[AB]\}\ (idx: A) =>
           \{first\} = \{advisorA first name\}
   >
           {last} => {advisorA last name}
   >
           \{name\} => \{-full-name-\}
           \{article\} => \{o(a)\}
    >
   >
           \{\text{narticle}\} => \{(a)\}
    >
           \{Article\} => \{O(A)\}
    >
           {Narticle} => {(A)}
           \{institution\} => \{-inst-\}
           \{ \text{titleinfo} \} => \{ -\text{info} - \} 
           \{\text{email}\} => \{--\}
           \{\text{phone}\} => \{--\}
           \{somedata[1]\}\ (idx:\ A) =>
             \{ fieldA \} => \{ field-Ax \}
             {fieldB} => {field-B}
             \{ fieldC \} => \{ field-C \}
             {fieldD} => {field-D}
        \{advisor[2]\}\ (idx: B) =>
           \{first\} => \{student2set first name\}
```

```
{last} => {student2set last name}
>
>
          \{name\} => \{-full-name-\}
          \{article\} => \{o(a)\}
>
          {\text{narticle}} => {(a)}
\{Article\} => \{O(A)\}
          {\text{Narticle}} => {(A)}
          \{institution\} => \{-inst-\}
         {titleinfo} => {-info-}

{email} => {--}

{phone} => {--}
         {somedata[1]} (idx: A) =>
             \{fieldA\} => \{field-Ax\}
             \{fieldB\} => \{field-B\}
             \{fieldC\} => \{field-C\}
             {fieldD} => {field-D}
         \{somedata[2]\}\ (idx:\ B) =>
              \begin{cases} \text{fieldA} \rbrace &=> \\ \text{field-Ax} \end{cases}   \begin{cases} \text{fieldB} \rbrace &=> \\ \text{field-B} \end{cases}   \begin{cases} \text{field-C} \rbrace &=> \\ \text{field-C} \end{cases} 
             \{ fieldD \} = \{ field-D \}
      \{\text{reviewers}[1]\}\ (\text{idx: A}) =>
         {first} => {reviewerI first name} {last} => {reviewerI last name}
         {\text{name}} => {\text{-full-name-}} 
{\text{article}} => {\text{o(a)}}
          {\text{narticle}} => {(a)}
>
          \{Article\} => \{O(A)\}
          {\text{Narticle}} => {(A)}
         \{institution\} \ => \ \{-inst-\}
          {\text{titleinfo}} => {\text{-info-}}
```