

DYALOC

Glasgow 2024

Initialising and Starting from Text Files



Adám Brudzewsky



DYALOG

Glasgow 2024

- ◆ APL language ← discussion group tonight!
 - ◆ Teaching APL
 - ◆ APL in text files
 - ◆ Online communities and services
- ... *plus much more*



Adám Brudzewsky — just call me *Adam*

DYALOG

Glasgow 2024

Initialising from Text Files



Adám Brudzewsky



Name
EM.aplf

```
[0] ErrNum {  
[1] (EM199) 150  
[2] }
```

File Edit View Window Session Log Action Options Tools Threads Help

← + - × ÷ * ⊗ ☒ ○ ! ? | | | | | | | | | | = ≠ ≤ < > ≥ ≡ ≠ ∨ ∧ ∼ ∨ ↑ ↓ ← → ⊆ ⊇ ⊄ ⊅ ⊆ ⊇ ⊆ ⊇ ⊆ ⊇ / \

```
Dyalog APL/W-64 Version 19.0.50049  
Serial number: 314159  
Sun Aug 25 18:48:03 2024  
|
```

Ready...

Ins

NUM

CurObj:

&:1

☐DQ:0

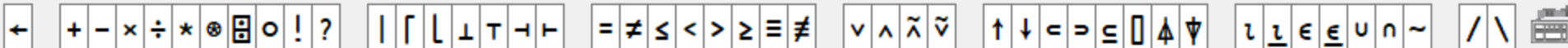
☐TRAP

☐SI:0

☐IO:1

☐ML:1

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Dyalog APL/W-64 Version 19.0.50049

Serial number: 314159

Sun Aug 25 18:48:03 2024

 SE.ATools.ErrNum 'RANK ERROR' 'LENGTH ERROR'

4 5

|

Ready...

Ins

NUM

CurObj: LENGTH (Undefined)

&:1

 DQ:0 TRAP SI:0 IO:1 ML:1



StartupSession > ATools



Search ATo...

Name

EM.aplf

```
[0] ErrNum←{
[1]     (EM199)15ω
[2] }
```




StartupSession > ATools

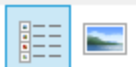
Search ATo...

- EM.aplf
- U.aplf

```

[0] U←{
[1]   ≡ω:[]UCS dec ω A vector
[2]   =hex []UCS ω A scalar
[3] }

```





StartupSession > ATools



Search ATo...

Name

EM.aplf

Run.aplf

U.aplf

```
[0] {ok}←Run args
[1] 'hex' 'dec'[]CY'dfns'
[2] ok←1
```

File Edit View Window Session Log Action Options Tools Threads Help

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```
Dyalog APL/W-64 Version 19.0.50049
Serial number: 314159
Sun Aug 25 19:04:28 2024
|
```

Ready...

Ins

NUM

CurObj:

&:1

☐DQ:0

☐TRAP

☐SI:0

☐IO:1

☐ML:1

File Edit View Window Session Log Action Options Tools Threads Help

← + - × ÷ * ⊗ ☒ ○ ! ? | | | | | | | | | | = ≠ ≤ < > ≥ ≡ ≠ ∨ ∧ ∼ ∨ ↑ ↓ ← → ⊆ ⊇ ⊄ ⊅ ∩ ∪ ∩ ∪ ~ / \

Dyalog APL/W-64 Version 19.0.50049

Serial number: 314159

Sun Aug 25 19:04:28 2024

]map SE.ATools

SE.ATools

. ▾ ErrNum Run U dec hex

|

Ready...

Ins

NUM

CurObj: SE.ATools (Namespace)

&:1

DQ:0

TRAP

SI:0

IO:1

ML:1

File Edit View Window Session Log Action Options Tools Threads Help

← + - × ÷ * ⊗ ☒ ○ ! ? | | | | | | | | = ≠ ≤ < > ≥ ≡ ≠ ∨ ∧ ∼ ∨ ↑ ↓ ← → ⊆ ⊇ ⊄ ⊅ ∩ ∪ ∩ ∪ ~ / \

```
Dyalog APL/W-64 Version 19.0.50049
Serial number: 314159
Sun Aug 25 19:04:28 2024
```

```
]map SE.ATools
```

```
SE.ATools
```

```
· ▽ ErrNum Run U dec hex
```

```
SE.ATools.U'>'
```

```
2369
```

```
SE.ATools.U'03bb'
```

```
λ
```

```
|
```

Ready...

Ins

NUM

CurObj: bb (Undefined)

&:1

DQ:0

TRAP

SI:0

IO:1

ML:1



StartupSession > ATools



Search ATo...

Name

EM.aplf

Run.aplf

U.aplf

```
[0] {ok}←Run args
[1] 'hex' 'dec'[]CY'dfns'
[2] ok←1
```



StartupSession > ATools



Search ATo...

| Name | |
|--------------|--|
| EM.aplf | [0] r←epigram |
| epigram.aplf | [1] :If 0=40 [ATX'epigrams' A cache |
| epigrams.txt | [2] epigrams↔[NGET(path,'/epigrams.txt')]1 |
| Run.aplf | [3] :EndIf |
| U.aplf | [4] r←(?≠→)epigrams |



StartupSession > ATools



Search ATo...

Name

- EM.aplf
- epigram.aplf
- epigrams.txt
- Run.aplf**
- U.aplf

```
[0] {ok}←Run args
[1] 'hex' 'dec'[]CY'dfns'
[2] ok←1
```




StartupSession > ATools



Search ATo...

Name

EM.aplf
epigram.aplf
epigrams.txt
Run.aplf
U.aplf

```
[0] {ok}←Run args  
[1] path↔args  
[2] 'hex' 'dec'[]CY'dfns'  
[3] ok←1
```

File Edit View Window Session Log Action Options Tools Threads Help

← + - × ÷ * ⊗ ☒ ○ ! ? | | | | | | | | = ≠ ≤ < > ≥ ≡ ≠ √ ^ √ √ ↑ ↓ ← → ⊆ □ △ ▽ ∫ ∫ ∫ ∫ ∫ ∫ ∫ ∫ ∫ ∫ / \

```
Dyalog APL/W-64 Version 19.0.50049  
Serial number: 314159  
Sun Aug 25 19:18:15 2024  
|
```

Ready...

Ins NUM

CurObj: &:1 □DQ:0 □TRAP □SI:0 □IO:1 □ML:1

File Edit View Window Session Log Action Options Tools Threads Help

| | | | | | | | | | |
|---|-------------|---------|-------------|-----------------|---------|-----------------|---------------|-----|--|
| ← | + - × ÷ * ⊗ | □ ○ ! ? | [] ⊥ ⊤ ↵ ↶ | = ≠ ≤ < > ≥ ≡ ≠ | √ ^ ∼ √ | ↑ ↓ ← → ⊆ □ △ ▽ | ℓ ℓ € € ∪ ∩ ~ | / \ | |
|---|-------------|---------|-------------|-----------------|---------|-----------------|---------------|-----|--|

```

Dyalog APL/W-64 Version 19.0.50049
Serial number: 314159
Sun Aug 25 19:18:15 2024
    ]map □SE.ATools
□SE.ATools
. ~ path
. ▽ ErrNum Run U dec epigram hex
|

```

Ready...

Ins NUM

CurObj: □SE.ATools (Namespace)

&:1

□DQ:0

□TRAP

□SI:0

□IO:1

□ML:1

File Edit View Window Session Log Action Options Tools Threads Help

| | | | | | | | | | |
|---|-------------|---------|-------------|-----------------|---------|-----------------|---------------|-----|--|
| ← | + - × ÷ * ⊗ | □ ○ ! ? | [] ⊥ ⊤ ⊢ ⊣ | = ≠ ≤ < > ≥ ≡ ≠ | √ ^ ∼ ∨ | ↑ ↓ ← → ⊆ ⊇ ⊄ ⊅ | ℓ ℓ € € ∪ ∩ ~ | / \ | |
|---|-------------|---------|-------------|-----------------|---------|-----------------|---------------|-----|--|

```

Dyalog APL/W-64 Version 19.0.50049
Serial number: 314159
Sun Aug 25 19:18:15 2024
    ]map □SE.ATools
□SE.ATools
. ~ path
. ∇ ErrNum Run U dec epigram hex
    □SE.ATools.epigram
Don't have good ideas if you aren't willing to be responsible for them.
|

```

Ready...

Ins NUM

CurObj: most (Undefined)

&:1

□DQ:0

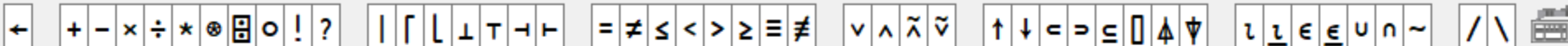
□TRAP

□SI:0

□IO:1

□ML:1

File Edit View Window Session Log Action Options Tools Threads Help



Dyalog APL/W-64 Version 19.0.50049

Serial number: 314159

Sun Aug 25 19:18:15 2024

]map [SE.ATools

[SE.ATools

. ~ path

. ▽ ErrNum Run U dec epigram hex

[SE.ATools.epigram

Don't have good ideas if you aren't willing to be responsible for them.

]map [SE.ATools

[SE.ATools

. ~ epigrams path

. ▽ ErrNum Run U dec epigram hex

Ready...

Ins

NUM

CurObj: [SE.ATools (Namespace)

&:1

[DQ:0

[TRAP

[SI:0

[IO:1

[ML:1

DYALOG

Glasgow 2024

Starting from Text Files



Adám Brudzewsky





This PC > Documents > AApp



Search AA...

Name

This folder is empty.

Select a file to preview.

0 items





This PC > Documents > AApp



Search AA...

Name

Avg.aplf

data.csv

Run.aplf

[0] Avg←{(+fω)÷#ω}

This PC > Documents > AApp Search AA...

- ^
- Avg.aplf
- data.csv
- Run.aplf

```

[0] {avg}←Run args;path;body;head
[1] path↔args
[2] []←'Welcome to The App!'
[3] (body head)←[]CSV(path,'/data.csv')θ(1 1 1 2)1
[4] avg←Avg body[;head[;score']
[5] []←(1 []C head);body;' ' 'AVERAGE:',avg

```



This PC > Documents > AApp

Search AA...

Name

Avg.aplf

data.csv

Run.aplf

```
[0] {avg}←Run args;path;body;head
[1] path↔args
[2] ←'Welcome to The App!'
[3] (body head)←CSV(path,'/data.csv')⊖(1 1 1 2)1
[4] avg←Avg body[;head;score']
[5] ←(1 [C head];body;' ' 'AVERAGE:',avg
```



Name

- Avg.aplf
- data.csv
- Run.aplf

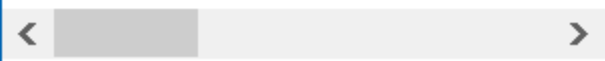
- Open in Terminal
- Load with Dyalog
- Run with Dyalog
- Open with Code
- Rename with PowerRename

- Give access to >

- SVN Checkout...
- TortoiseSVN >

- New >

- Properties



3 items

Window title bar: — □ ×

Search AA... 🔍

a file to preview.

Taskbar icons: [Task View] [File Explorer]



Name

- Avg.aplf
- data.csv
- Run.aplf

- Open in Terminal
- Load with Dyalog
- Run with Dyalog
- Open with Code
- Rename with PowerRename

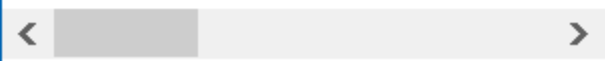
- Give access to >

- SVN Checkout...
- TortoiseSVN >

- New >

- Properties

a file to preview.



3 items



File Edit View Window Session Log Action Options Tools Threads Help

← + - × ÷ * ⊗ ☒ ○ ! ? | | | | | | | | = ≠ ≤ < > ≥ ≡ ≠ ∨ ^ ~ ∨ ∨ ↑ ↓ ← → ⊆ ⊇ ⊄ ⊅ ⊆ ⊇ ⊆ ⊇ / \

Dyalog APL/W-64 Version 19.0.50049
 Serial number: 314159
 Fri Aug 30 11:09:58 2024
 Linked: # ↔ C:\Users\Adam\Documents\AApp
 Welcome to The App!

| FIRST | LAST | COUNTRY | SCORE |
|----------|--------------|---------|-------|
| Ali | Tiamat | Iraq | 964 |
| Maria | Ladon | Greece | 30 |
| Santiago | Quetzalcoatl | Mexico | 52 |
| Himari | Ryujin | Japan | 81 |
| Olivia | Nidhogg | Norway | 47 |
| AVERAGE: | | | 234.8 |

Ready...

Ins NUM

CurObj:

&:1

DQ:0

TRAP

SI:0

IO:1

ML:1



Command Prompt



```
C:\Users\Adam>dya\log LOAD=Documents/AApp|
```



adam@adam-laptop: ~



```
adam@adam-laptop:~$ dyalog LOAD=./AApp|
```

Initialising from Text Files

```
□SE.Dyalog.StartupSession.VerSpec  
StartupSession/namespace/fn.aplf  
/Run.aplf
```

Starting from Text Files

```
/path/to/workspace/fn.aplf  
/Run.aplf
```

