Test Book

This book contains some special notebook cells that Open Education Project supports.

General cell tests are supported by [Jupyter Book](#).

1. Special Displays

In this part of this book we will cover some cells that have special displays.

List:

- 1 - A sample image that use customized styles
- 2 - Display String in customized styles
- 3 - Display terminal shell command results
- 4 - Display bash command in customized styles
- 5 - Use HTML and CSS to customize styles

1.1. A sample image that use customized styles

Figure: A Sample Image that use special style

1.2. Display String in customized styles

0b10101110 = 0xAE

1.3. Display terminal shell command results

```
$ hello

Command 'hello' not found, but can be installed with:

snap install hello            # version 2.10, or
apt  install hello            # version 2.10-2ubuntu2
apt  install hello-traditional  # version 2.10-5

See 'snap info hello' for additional versions.

$
```

1.4. Display bash command in customized styles

```
$ man mkdir
MKDIR(1)                          User Commands                          MKDIR(1)

NAME
       mkdir - make directories

SYNOPSIS
       mkdir [OPTION]... DIRECTORY...

DESCRIPTION
       Create the DIRECTORY(ies), if they do not already exist.

       Mandatory  arguments  to  long  options are mandatory for short options
       too.

       -m, --mode=MODE
              set file mode (as in chmod), not a=rwx - umask

       -p, --parents
              no error if existing, make parent directories as needed

       -v, --verbose
              print a message for each created directory

       -Z     set SELinux security context of each created  directory  to  the
              default type

       --context[=CTX]
              like  -Z,  or  if CTX is specified then set the SELinux or SMACK
              security context to CTX

       --help display this help and exit

       --version
              output version information and exit

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REPORTING BUGS
       GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
       Report mkdir translation bugs to <https://translationproject.org/team/>

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       GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
       This  is  free  software:  you  are free to change and redistribute it.
       There is NO WARRANTY, to the extent permitted by law.

SEE ALSO
       mkdir(2)

       Full documentation at: <https://www.gnu.org/software/coreutils/mkdir>
       or available locally via: info '(coreutils) mkdir invocation'

GNU coreutils 8.30             September 2019                      MKDIR(1)
runner@fv-az335-299:~$
```

1.5. Use HTML and CSS to customize styles

This is the example of image overlapping with backgrounds.

This is some sample texts.: This is some sample texts.This is some sample texts.This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts. This is some sample texts.

2. Animation Examples

In this part of this book we will cover some special animated cells.

List:

- 1 - Display bytes in special styles
- 2 - Display series of slide images
- 3 - Display html table
- 4 - Display iframe - other website
- 5 - Display iframe - other interactive media player
- 6 - Display iframe - interactive terminal media player

2.1. Display bytes in special styles

$[b_7$	b_6	b_5	b_4	b_3	b_2	b_1	$b_0]$
1	0	1	0	1	1	1	0

2.2. Display series of slide images

○ Once ○ Loop ○ Reflect

2.3. Display html table

Table Shell Control Operators

Control Operator	Description
newline	End of line
||	Or list operator
&&	And list operator
;	Sequential list operator
|	Pipe Operator
&	Background Operator
(	Subshell list begin Operator
)	Subshell list end Operator
;;	Case statement end matching Operator
;&	Case statement fall through Operator
;;&	Case statement continue matching Operator

2.4. Display iframe - other website

```
display(IFrame("https://en.wikipedia.org/wiki/List_of_Unix_commands", height=600,
width="100%"))
```

WIKIPEDIA

List of Unix commands

This is a list of Unix commands as specified by IEEE Std 1003.1-2008, which is part of the Single UNIX Specification (SUS). These commands can be found on Unix operating systems and most Unix-like operating systems.

Utilities listed in POSIX.1-2017

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See also

Footnotes

External links

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IEEE Std 1003.1-2008 utilities				
Name	**Category**	**Status (Option code)**	**Description**	**First appeared**
admin	SCCS	Optional (XSI)	Create and administer SCCS files	PWB UNIX
alias	Misc	Mandatory	Define or display aliases	
ar	Misc	Mandatory	Create and maintain library archives	Version 1

2.5. Display iframe - other interactive media player

```
display(HTML('''
<iframe src="https://jappavoo.github.io/SOL6502/index.html", height="980px"
width="100%"></iframe>
'''))
```

CPU - SOL 6502		**RAM/ROM (Memory)**

General Purpose Registers

Index X

Index Y

Accumulator A

Stack Pointer S

Procersor Status P

NV BDIZC

Operation

Addr Mode

The Loop!
Fetch

Execute   Decode

IR   PC 0000000000000000

Data Bus Buffer 00000000   Address Bus Buffer 0000000000000000

Memory Buses and Decoder

Input Device   **Output Device**

help   step   run   halt   reset   Load img: ▼

Animation On: ☑ Speed:

SOL6502 ASCII CONSOLE TERMINAL: device address 1111111100000000

Status:

clear

2.6. Display iframe - interactive terminal media player

Source code: https://jappavoo.github.io/SOL6502

```
display(HTML('''
<iframe src="https://jappavoo.github.io/SOL6502/asciinema/atest.html",
height="600x" width="100%"></iframe>
'''))
```

00:00

By Red Hat

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