

## Supplementary Notes for PYP1-FEB24

## REPO:

<https://github.com/lavenderlens/PYP1-FEB24>

REPL on section 17 databases:

<https://replit.com/@AlanLavender/databases>

[illegible]

## VS Code shortcuts - Python environment

CTRL + B	toggle explorer pane / full screen
CTRL + +/-	up/down font size
CTRL + /	toggle comment on/off
CTRL + D	multi-cursor select
ALT + SHIFT + DOWN/UP	duplicate line down/up

[illegible]

INTERACTIVE HELP:

```
>>> dir(__builtins__)
>>> help(str)
>>> q
```

Yields:

```
>>> dir(__builtins__)
['ArithmeticError', 'AssertionError', 'AttributeError', 'BaseException',
'BaseExceptionGroup', 'BlockingIOError', 'BrokenPipeError', 'BufferError',
'BytesWarning', 'ChildProcessError', 'ConnectionAbortedError',
'ConnectionError', 'ConnectionRefusedError', 'ConnectionResetError',
'DeprecationWarning', 'EOFError', 'Ellipsis', 'EncodingWarning',
'EnvironmentError', 'Exception', 'ExceptionGroup', 'False', 'FileExistsError',
'FileNotFoundError', 'FloatingPointError', 'FutureWarning', 'GeneratorExit',
'IOError', 'ImportError', 'ImportWarning', 'IndentationError', 'IndexError',
'InterruptedError', 'IsADirectoryError', 'KeyError', 'KeyboardInterrupt',
'LookupError', 'MemoryError', 'ModuleNotFoundError', 'NameError', 'None',
'NotADirectoryError', 'NotImplemented', 'NotImplementedError', 'OSError',
'OverflowError', 'PendingDeprecationWarning', 'PermissionError',
'ProcessLookupError', 'RecursionError', 'ReferenceError', 'ResourceWarning',
'RuntimeError', 'RuntimeWarning', 'StopAsyncIteration', 'StopIteration',
'SyntaxError', 'SyntaxWarning', 'SystemError', 'SystemExit', 'TabError']
```

```
'TimeoutError', 'True', 'TypeError', 'UnboundLocalError', 'UnicodeDecodeError',
'UnicodeEncodeError', 'UnicodeError', 'UnicodeTranslateError',
'UnicodeWarning', 'UserWarning', 'ValueError', 'Warning', 'ZeroDivisionError',
'__build_class__', '__debug__', '__doc__', '__import__', '__loader__', '__name__',
'__package__', '__spec__', 'abs', 'aiter', 'all', 'anext', 'any', 'ascii', 'bin', 'bool',
'breakpoint', 'bytearray', 'bytes', 'callable', 'chr', 'classmethod', 'compile',
'complex', 'copyright', 'credits', 'delattr', 'dict', 'dir', 'divmod', 'enumerate', 'eval',
'exec', 'exit', 'filter', 'float', 'format', 'frozenset', 'getattr', 'globals', 'hasattr',
'hash', 'help', 'hex', 'id', 'input', 'int', 'isinstance', 'issubclass', 'iter', 'len', 'license',
'list', 'locals', 'map', 'max', 'memoryview', 'min', 'next', 'object', 'oct', 'open', 'ord',
'pow', 'print', 'property', 'quit', 'range', 'repr', 'reversed', 'round', 'set', 'setattr',
'slice', 'sorted', 'staticmethod', 'str', 'sum', 'super', 'tuple', 'type', 'vars', 'zip']
```

```
>>> dir(str)
```

```
['__add__', '__class__', '__contains__', '__delattr__', '__dir__', '__doc__', '__eq__',
'__format__', '__ge__', '__getattr__', '__getitem__', '__getnewargs__',
'__getstate__', '__gt__', '__hash__', '__init__', '__init_subclass__', '__iter__', '__le__',
'__len__', '__lt__', '__mod__', '__mul__', '__ne__', '__new__', '__reduce__',
'__reduce_ex__', '__repr__', '__rmod__', '__rmul__', '__setattr__', '__sizeof__', '__str__',
'__subclasshook__', 'capitalize', 'casefold', 'center', 'count', 'encode', 'endswith',
'expandtabs', 'find', 'format', 'format_map', 'index', 'isalnum', 'isalpha', 'isascii',
'isdecimal', 'isdigit', 'isidentifier', 'islower', 'isnumeric', 'isprintable', 'isspace',
'istitle', 'isupper', 'join', 'ljust', 'lower', 'lstrip', 'maketrans', 'partition',
'removeprefix', 'removesuffix', 'replace', 'rfind', 'rindex', 'rjust', 'rpartition', 'rsplit',
'rstrip', 'split', 'splitlines', 'startswith', 'strip', 'swapcase', 'title', 'translate', 'upper',
'zfill']
```

```
>>> help(str.upper)
```

Help on method\_descriptor:

```
upper(self, /)
```

Return a copy of the string converted to uppercase.

```
q # for quit help
```

```
# only return builtins not errors as well
```

```
# >>> dir(__builtins__)[dir(__builtins__).index('abs'):]
```

## CONTAINER TYPES

Supported container types are

```
graph TD; Containers --> Sequences; Containers --> set; Containers --> dict; Sequences --> list; Sequences --> tuple; Sequences --> str;
```

Note: Containers can hold anything and need not have homogeneous content.

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## Post course readme links

For more info on extending classes:

<https://www.geeksforgeeks.org/inheritance-and-composition-in-python/>

<https://www.geeksforgeeks.org/multiple-inheritance-in-python/>

For more info on creating custom exceptions by extending base class

Exception:

<https://www.geeksforgeeks.org/user-defined-exceptions-python-examples/>

For more info on list comprehensions:

<https://www.geeksforgeeks.org/python-list-comprehension/>

## RECOMMENDED READING:

## The Python Docs

<https://www.python.org/doc/>

## RealPython

<https://realpython.com/>

## GeeksForGeeks

<https://www.geeksforgeeks.org/python-programming-language/?ref=lbp>

## **Benjamin Bennett Alexander on Twitter/X**

<https://twitter.com/RealBenjizo>

Happy Hacking!

Alan