Python: module kinds.kinds

kinds.kinds

index

Reference implementation of PEP 0242

Modules

PropertiedClasses kinds._kinds

Classes

PropertiedClasses.Properties.PropertiedClass
    KindObject
        DoubleComplexKindObject
        DoubleKindObject
        FloatKindObject
        IntKindObject
        LongKindObject

class ***DoubleComplexKindObject***(KindObject)

```
Kind object for a floating type corresponding to C doublecomplex.
```

Method resolution order:
    DoubleComplexKindObject
    KindObject
    PropertiedClasses.Properties.PropertiedClass

Methods defined here:

__call__(self, x, y=None)

```
Convert to a standard Python complex.
```

__init__(self)

```
Create a complex kind object using the given float kind and c
```

float_kind(self)

Methods inherited from KindObject:

str(self)

Methods inherited from PropertiedClasses.Properties.PropertiedClass:

__delattr__(self, name)

__getattr__(self, name)

__setattr__(self, name, value)

get_property_d(self, name)
```
Return the 'del' property handler for name that self uses.
Returns None if no handler.
```

get_property_g(self, name)
```
Return the 'get' property handler for name that self uses.
Returns None if no handler.
```

get_property_s(self, name)
```
Return the 'set' property handler for name that self uses.
Returns None if no handler.
```

is_internal_attribute(self, name)
```
If is_internal_attribute(name), name does not use the
property handler. Default version: any name that starts with
```

set_property(self, name, actg=None, acts=None, actd=None, nowrite=None, nodelete=None)
```
Set attribute handlers for  name to methods actg, acts, actd
None means no change for that action.
nowrite = 1 prevents setting this attribute.
    nowrite defaults to 0.
nodelete = 1 prevents deleting this attribute.
    nodelete defaults to 1 unless actd given.
if nowrite and nodelete is None: nodelete = 1
```

class ***DoubleKindObject***(KindObject)
```
Kind object for a floating type corresponding to C double.
```

Method resolution order:
DoubleKindObject
KindObject
PropertiedClasses.Properties.PropertiedClass

Methods defined here:

__call__(self, x)
```
Convert to a standard Python real.
```

__init__(self)
```
Create the kind object corresponding to a C double, standard
```

Methods inherited from KindObject:

str(self)

Methods inherited from PropertiedClasses.Properties.PropertiedClass:

__delattr__(self, name)

__getattr__(self, name)

__setattr__(self, name, value)

get_property_d(self, name)

```
Return the 'del' property handler for name that self uses.
Returns None if no handler.
```

get_property_g(self, name)

```
Return the 'get' property handler for name that self uses.
Returns None if no handler.
```

get_property_s(self, name)

```
Return the 'set' property handler for name that self uses.
Returns None if no handler.
```

is_internal_attribute(self, name)

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property handler. Default version: any name that starts with
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None means no change for that action.
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    nowrite defaults to 0.
nodelete = 1 prevents deleting this attribute.
    nodelete defaults to 1 unless actd given.
if nowrite and nodelete is None: nodelete = 1
```

class ***FloatKindObject***(KindObject)

```
Kind object for a floating type corresponding to C float.
```

Method resolution order:

FloatKindObject
KindObject
PropertiedClasses.Properties.PropertiedClass

Methods defined here:

__call__(self, x)
```
Convert to floating type corresponding to C float.
```

__init__(self)
```
Create the kind object corresponding with C float.
```

Methods inherited from KindObject:

str(self)

Methods inherited from PropertiedClasses.Properties.PropertiedClass:

__delattr__(self, name)

__getattr__(self, name)

__setattr__(self, name, value)

get_property_d(self, name)
```
Return the 'del' property handler for name that self uses.
Returns None if no handler.
```

get_property_g(self, name)
```
Return the 'get' property handler for name that self uses.
Returns None if no handler.
```

get_property_s(self, name)
```
Return the 'set' property handler for name that self uses.
Returns None if no handler.
```

is_internal_attribute(self, name)
```
If is_internal_attribute(name), name does not use the
property handler. Default version: any name that starts with
```

set_property(self, name, actg=None, acts=None, actd=None, nowrite=None, nodelete=None)
```
Set attribute handlers for  name to methods actg, acts, actd
None means no change for that action.
nowrite = 1 prevents setting this attribute.
    nowrite defaults to 0.
nodelete = 1 prevents deleting this attribute.
    nodelete defaults to 1 unless actd given.
if nowrite and nodelete is None: nodelete = 1
```

class ***IntKindObject***(KindObject)
```
Kind object for standard integers, corresponding to C ints.
```

Method resolution order:
IntKindObject

KindObject
PropertiedClasses.Properties.PropertiedClass

Methods defined here:

__call__(self, n)
```
Convert to a standard integer.
```

__init__(self)
```
Create the kind object for standard integers.
```

Methods inherited from KindObject:

str(self)

Methods inherited from PropertiedClasses.Properties.PropertiedClass:

__delattr__(self, name)

__getattr__(self, name)

__setattr__(self, name, value)

get_property_d(self, name)
```
Return the 'del' property handler for name that self uses.
Returns None if no handler.
```

get_property_g(self, name)
```
Return the 'get' property handler for name that self uses.
Returns None if no handler.
```

get_property_s(self, name)
```
Return the 'set' property handler for name that self uses.
Returns None if no handler.
```

is_internal_attribute(self, name)
```
If is_internal_attribute(name), name does not use the
property handler. Default version: any name that starts with
```

set_property(self, name, actg=None, acts=None, actd=None, nowrite=None, nodelete=None)
```
Set attribute handlers for  name to methods actg, acts, actd
None means no change for that action.
nowrite = 1 prevents setting this attribute.
    nowrite defaults to 0.
nodelete = 1 prevents deleting this attribute.
    nodelete defaults to 1 unless actd given.
if nowrite and nodelete is None: nodelete = 1
```

class ***KindObject***(PropertiedClasses.Properties.PropertiedClass)

A KindObject is a constructor for certain varieties of integers, floating point numbers, and complex numbers.

Methods defined here:

__init__(self, **meta)

str(self)

Methods inherited from PropertiedClasses.Properties.PropertiedClass:

__delattr__(self, name)

__getattr__(self, name)

__setattr__(self, name, value)

get_property_d(self, name)
Return the 'del' property handler for name that self uses.
Returns None if no handler.

get_property_g(self, name)
Return the 'get' property handler for name that self uses.
Returns None if no handler.

get_property_s(self, name)
Return the 'set' property handler for name that self uses.
Returns None if no handler.

is_internal_attribute(self, name)
If is_internal_attribute(name), name does not use the
property handler. Default version: any name that starts with

set_property(self, name, actg=None, acts=None, actd=None, nowrite=None, nodelete=None)
Set attribute handlers for name to methods actg, acts, actd
None means no change for that action.
nowrite = 1 prevents setting this attribute.
    nowrite defaults to 0.
nodelete = 1 prevents deleting this attribute.
    nodelete defaults to 1 unless actd given.
if nowrite and nodelete is None: nodelete = 1

class ***LongKindObject***(KindObject)

Kind object for Python long -- no corresponding C type.

Method resolution order:
LongKindObject
KindObject

PropertiedClasses.Properties.PropertiedClass

Methods defined here:

__call__(self, n)
```
Convert to a standard integer.
```

__init__(self)
```
Create the kind object for standard integers.
```

Methods inherited from KindObject:

str(self)

Methods inherited from PropertiedClasses.Properties.PropertiedClass:

__delattr__(self, name)

__getattr__(self, name)

__setattr__(self, name, value)

get_property_d(self, name)
```
Return the 'del' property handler for name that self uses.
Returns None if no handler.
```

get_property_g(self, name)
```
Return the 'get' property handler for name that self uses.
Returns None if no handler.
```

get_property_s(self, name)
```
Return the 'set' property handler for name that self uses.
Returns None if no handler.
```

is_internal_attribute(self, name)
```
If is_internal_attribute(name), name does not use the
property handler. Default version: any name that starts with
```

set_property(self, name, actg=None, acts=None, actd=None, nowrite=None, nodelete=None)
```
Set attribute handlers for  name to methods actg, acts, actd
None means no change for that action.
nowrite = 1 prevents setting this attribute.
    nowrite defaults to 0.
nodelete = 1 prevents deleting this attribute.
    nodelete defaults to 1 unless actd given.
if nowrite and nodelete is None: nodelete = 1
```

Functions

complex_kind(nd, n)

```
Return a complex kind object with at least nd digits of precision
that will hold numbers in the range [-10**n, 10**n], in which
1.e-n is not zero.
```

float_kind(nd, n)

```
Return a floating kind object with at least nd digits of precision
that will hold numbers in the range [-10**n, 10**n], in which
1.e-n is not zero.

If nd = n = 0, return kind corresponding to Python default floatin
```

int_kind(n)

```
Return a kind object corresponding to an integer kind holding numb
with n decimal digits.
If n is zero, return default_int_kind.
```

Data

complex_kinds = [<kinds.kinds.DoubleComplexKindObject instance>]
default_complex_kind = <kinds.kinds.DoubleComplexKindObject instance>
default_float_kind = <kinds.kinds.DoubleKindObject instance>
default_int_kind = <kinds.kinds.IntKindObject instance>
default_long_kind = <kinds.kinds.LongKindObject instance>
float_kinds = [<kinds.kinds.DoubleKindObject instance>]
int_kinds = [<kinds.kinds.IntKindObject instance>, <kinds.kinds.LongKindObject instance>]