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Ruby 101

Intermediate Ruby:Modules and Mixins

Intermediate Ruby:

Modules:

Groups of classes, methods, attributes, constants
Accessible via *Module_Name*::
Can be included into another object or class
Provide namespace separation

Module Definition:

```
module ModuleName
    MY_CONSTANT = 1
end

ModuleName::MY_CONSTANT

OR

include ModuleName
MY_CONSTANT
```

Module Nesting:

```
module ModuleName
    MY_CONSTANT = 1
    module InnerModule
    end
end

module ModuleName::InnerModule
end
```

Module Nesting:

```
module ModuleName
    class SpecialClass
    end
end

my_instance = ModuleName::SpecialClass.new
```

Intermediate Ruby:

Mixin:

```
include module_name

class MyClass
    include ModuleName
    def const
        MY_CONSTANT
    end
end

a = MyClass.new
a.const
```

Intermediate Ruby:

Module methods:

```
module MyModule
    MY_CONSTANT = 1
    def my_instance_method
        :instance_method
    end
    def self.my_class_method #sometimes module method
        :class_method
    end
end

MyModule::my_class_method
MyModule::MY_CONSTANT
include MyModule
my_instance_method
MY_CONSTANT
```

Extend: Access instance methods

```
module MyModule
    def my_instance_method
        :instance_method
    end
    def self.my_class_method #sometimes module method
        :class_method
    end
end

module MySecondMod
    extend MyModule
    def self.new_method
        my_instance_method
    end
end
```