

```
In [1]: import yaml
```

```
In [12]: data = """
a: 1
b:
  c: 2
  d: 3
  e:
    - a
    - n
    - d
"""

a = yaml.load(data)
```

```
/var/folders/kx/bl0fyd5j03gcrlfsyd6g21l40000gn/T/ipykernel_65971/225264803.py:13: YAMLLoadWarning: calling yaml.load() without Loader=... is deprecated, as the default Loader is unsafe. Please read https://msg.pyyaml.org/load for full details.
a = yaml.load(data)
```

```
In [13]: a
```

```
Out[13]: {'a': 1, 'b': {'c': 2, 'd': 3, 'e': ['a', 'n', 'd']}}
```

```
In [15]: print(yaml.dump(a))
```

```
a: 1
b:
  c: 2
  d: 3
  e:
    - a
    - n
    - d
```

```
In [17]: yaml.load("""
none: [~, null]
bool: [true, false, on, off]
int: 42
float: 3.14159
list: [LITE, RES_ACID, SUS_DEXT]
dict: {hp: 13, sp: 5}
""", Loader=yaml.UnsafeLoader)
```

```
Out[17]: {'none': [None, None],
'bool': [True, False, True, False],
'int': 42,
'float': 3.14159,
'list': ['LITE', 'RES_ACID', 'SUS_DEXT'],
'dict': {'hp': 13, 'sp': 5}}
```

```
In [18]: class Hero:
    def __init__(self, name, hp, sp):
        self.name = name
        self.hp = hp
        self.sp = sp

    def __repr__(self):
        return f"{self.__class__.__name__}(name={self.name}, hp={self.hp}, s

    def __str__(self) -> str:
        pass
```

```
In [19]: cjl = yaml.load("""
!!python/object:__main__.Hero
name: cjl
hp: 12312313
sp: 213123123
""", Loader=yaml.UnsafeLoader
)
```

```
In [20]: cjl
```

```
Out[20]: Hero(name=cjl, hp=12312313, sp=213123123)
```

```
In [22]: print(yaml.dump(Hero("Galain Ysseleg", hp=-3, sp=2)))

!!python/object:__main__.Hero
hp: -3
name: Galain Ysseleg
sp: 2
```

```
In [29]: class Monster(yaml.YAMLObject):
    yaml_tag = '!Monster'
    def __init__(self, name, hp, sp, attacks):
        self.name = name
        self.hp = hp
        self.sp = sp
        self.attacks = attacks

    def __repr__(self) -> str:
        return "%s(name=%r, hp=%r, ac=%r, attacks=%r)" % (self.__class__.__n
```

```
In [30]: mm = yaml.load("""
!Monster
name: CCC
hp: [2,6]
sp: 2222
attacks:
  - BITE
  - HURT
  - RUN
  - HIDE
""", Loader=yaml.UnsafeLoader)
```

```
In [31]: mm
```

```
Out[31]: Monster(name='CCC', hp=[2, 6], ac=2222, attacks=['BITE', 'HURT', 'RUN', 'HIDE'])
```

```
In [34]: print(yaml.dump(mm))
```

```
!Monster
attacks:
- BITE
- HURT
- RUN
- HIDE
hp:
- 2
- 6
name: CCC
sp: 2222
```

```
In [86]: class Dice(tuple):
    def __new__(cls, a, b):
        return tuple.__new__(cls, [a, b])
    def __repr__(self):
        return f"Dice({self[0]},{self[1]})"
```

```
In [87]: print(yaml.dump(Dice(1,2)))
```

```
!!python/object/new:__main__.Dice
- !!python/tuple
  - 1
  - 2
```

```
In [118...] def dice_pres(dumper, data):
    return dumper.represent_scalar('!dice', f'{data[0]}d{data[1]}')
```

```
In [119...] yaml.add_representer(Dice, dice_pres)
```

```
In [120...] print(yaml.dump(Dice(1,2)))
print(yaml.dump({
    "Hello": [Dice(2,3), Dice(4, 5)]
}))
```

```
!dice '1d2'

Hello:
- !dice '2d3'
- !dice '4d5'
```

```
In [121...] def dice_constructor(loader, node):
    value = loader.construct_scalar(node)
    a, b = map(int, value.split('d'))
    return Dice(a, b)
```

```
In [127... yaml.add_constructor("!dice", dice_constructor)
```

```
In [128... a = yaml.unsafe_load("""  
initial hit points: !dice 1d2  
""")
```

```
In [ ]:
```