Lab01 and hw01

Not ending loop

What would python display

```
>>> positive = 28

>>> while positive:
...     print("positive?")
...     positive -= 3
```

In What Would Python Display problems, always follow these rules:

```
...
```

If an expression would take forever to evaluate, write Forever.

```
...
```

Veritasiness

What would python display

- Short-circuiting
- >>> True and 1 / 0 and False
- >>> True or 1 / 0 or False
- 1/0 or True

Fix the Bug

Lab01

```
def both_odd(a, b):
    """Returns True if both a and b are odd numbers.

>>> both_odd(-1, 1)
True
>>> both_odd(2, 1)
False
"""

return(a)and(b)% 2 == 1)# You can replace this line!
```

Factorial

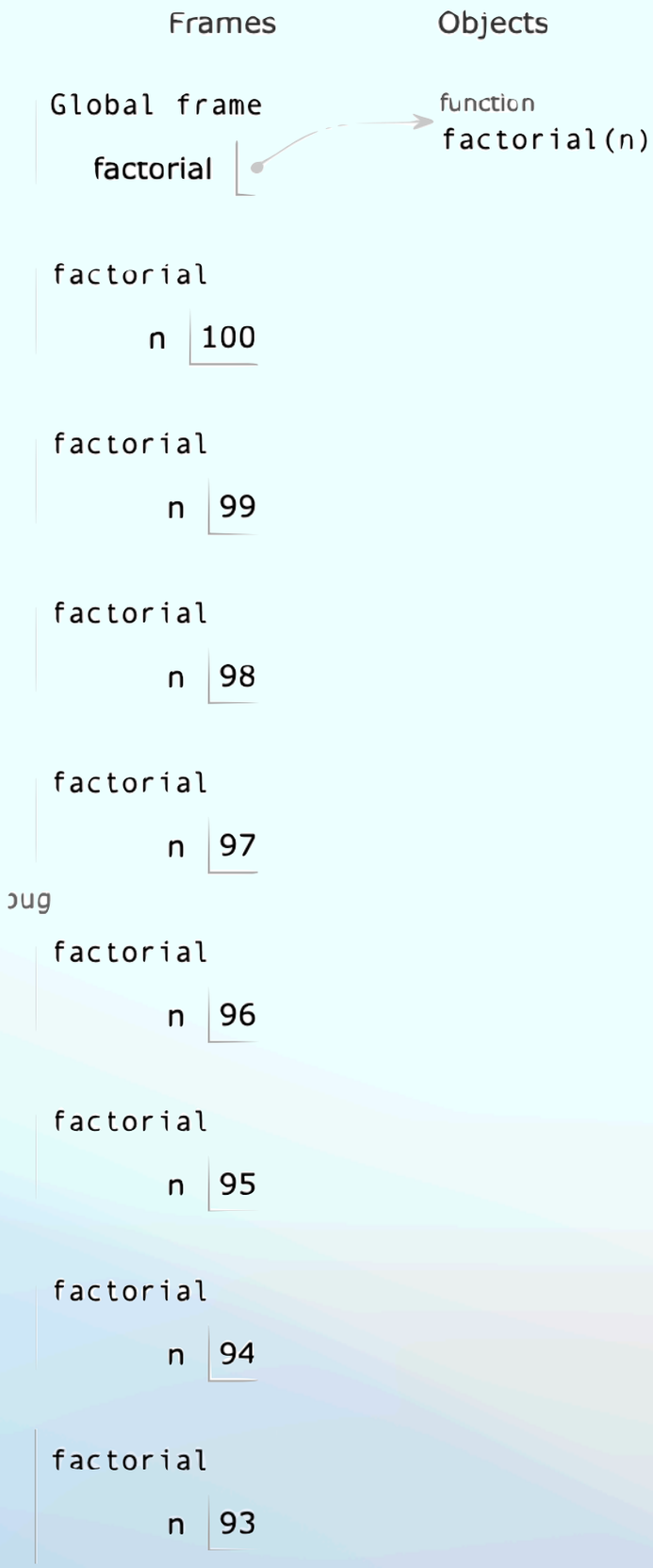
Lab01

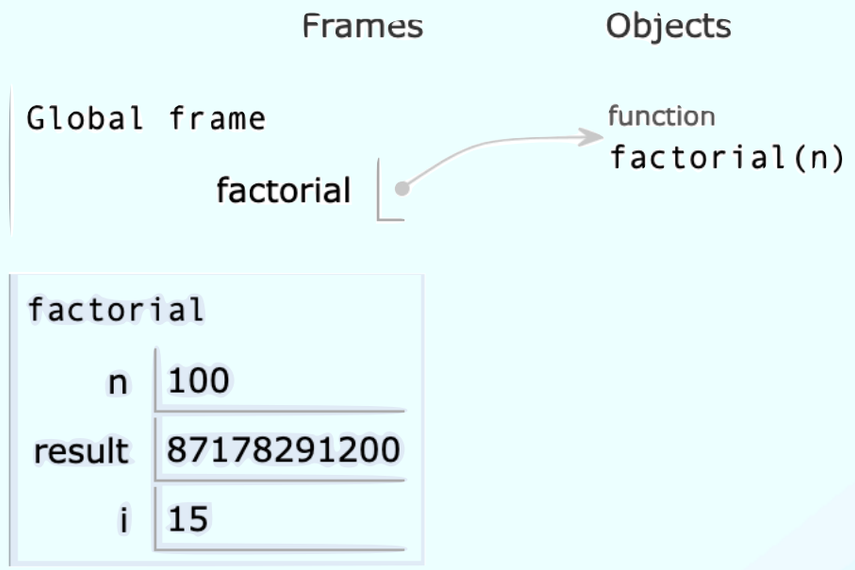
```
def factorial(n):
    if n==1:
        return 1
    else:
        return n*factorial(n-1)
```

```
def factorial(n):
    result=1
    for i in range(1,n+1):
        result=result*i
    return result
```

Factorial

Lab01





Number of 9 / Min Digit

Lab01

- How to get digits of a number
- x%10, x=x//10
- x%2, x=x//2

A Sub Abs B

Hw01

```
from operator import add, sub, mul, neg

def a_sub_abs_b(a, b):
    """Return a-abs(b), but do not call abs.

    >>> # a check that you didn't change the return statement!
    >>> import inspect, re
    >>> re.findall(r'^\s*(return .*)', inspect.getsource(a_sub_abs_b), re.M)
    ['return h(a, b)']
    """
    if b >= 0:
        h = ____
    else:
        h = ____
    return h(a, b)
```

If Function vs Statement

Hw01

```
def if_function(condition,
  true_result, false_result):
    if condition:
        return true_result
    else:
        return false_result
```

```
if cond:
    a()
else:
    b()
```

```
if_function(cond, a(), b())
```

Double Ones

Hw01

- Return true if n has two ones **in a row**.

Questions are welcome