

# Lab01 and hww01

# 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

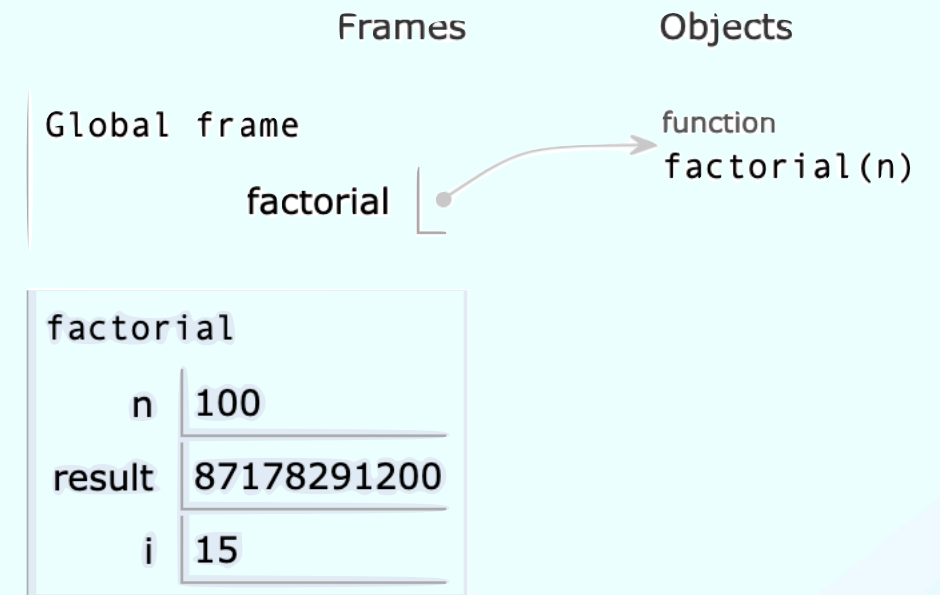
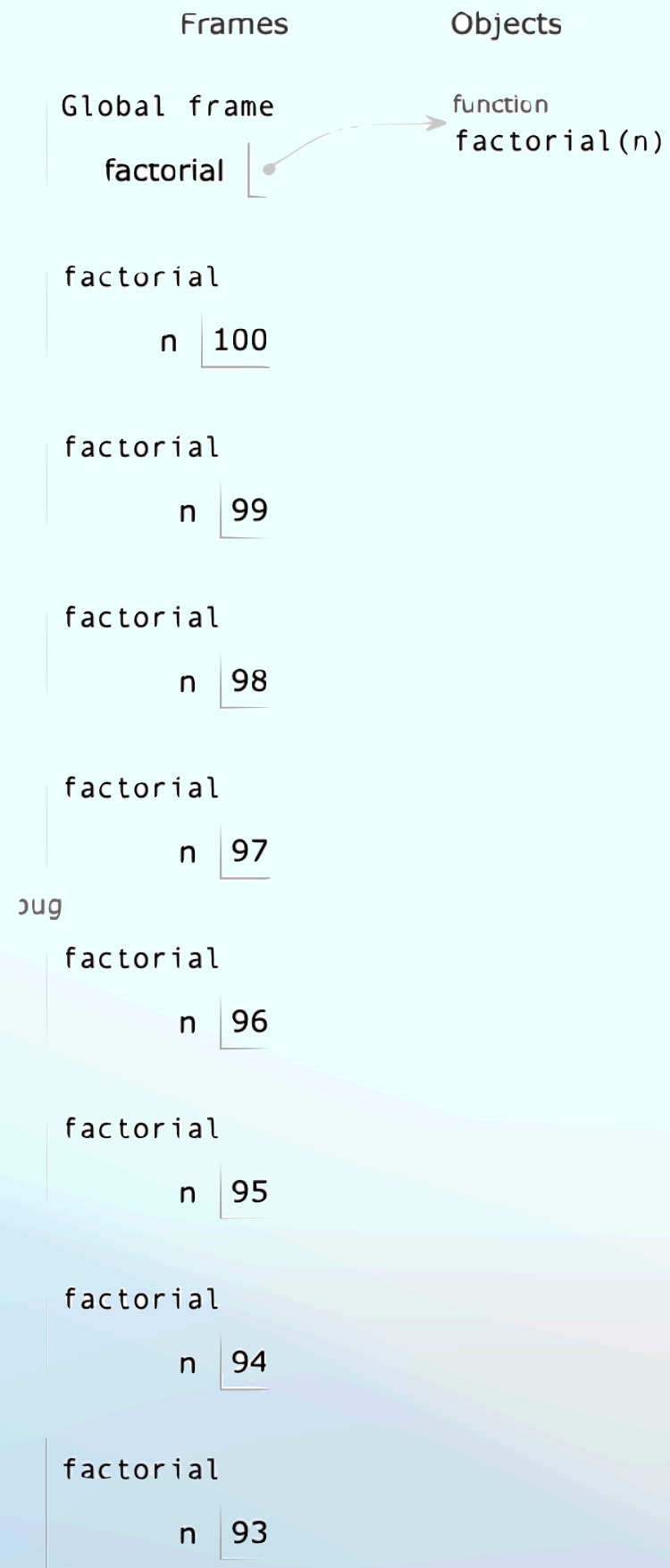
Lab01

```
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**.

The background of the slide features a stylized mountain range. The mountains are represented by overlapping, rounded shapes in various shades of blue, ranging from a deep navy blue to a lighter, vibrant blue. The peaks are jagged and layered, creating a sense of depth. The top of the image is a solid black, which transitions into the blue mountains.

Questions are welcome