

Dictionaries

(Spring 2020 March 6th Lecture 20)

1. Consider the following dictionary:

```
color_code = {'red': '#FF0000',  
              'green': '#00FF00',  
              'blue': '#0000FF'}
```

What will be printed for the following expressions? If an expression generates an error write "error".

Expression	Value
<code>color_code['red']</code>	
<code>color_code['black']</code>	
<code>color_code['#00FF00']</code>	
<code>color_code[2]</code>	

2. Consider the following dictionary:

```
person = {}  
person['name'] = 'Adalbert Gerald Soosai Raj'  
person['age'] = 30  
person['isAlive'] = True  
person['phone'] = [  
    {'type': 'office', 'number': '608-123-4567'},  
    {'type': 'home', 'number': '608-987-6543'}  
]  
person['address'] = {'street': '1210 West Dayton Street',  
                    'city': 'Madison', 'state': 'WI', 'zip': 53706}
```

What is the **type** (int, float, bool, str, list, dict) of the following expressions?

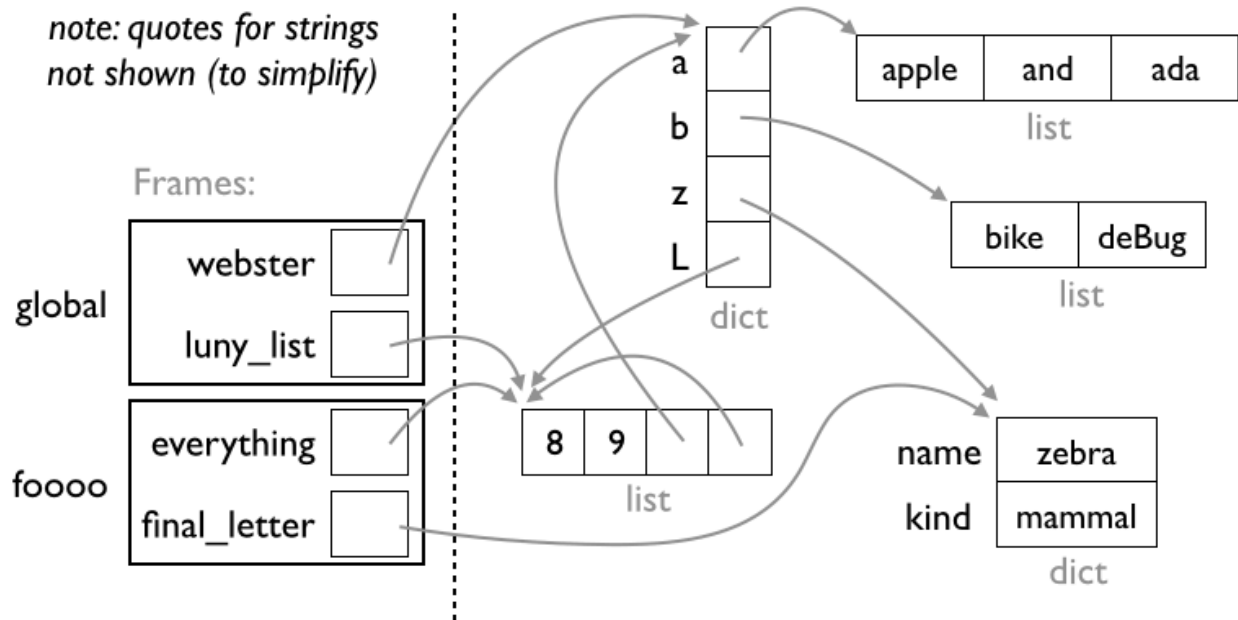
Expression	Type	Expression	Type
<code>person</code>		<code>person['isAlive']</code>	
<code>person['name']</code>		<code>person['phone']</code>	
<code>person['age']</code>		<code>person['address']</code>	

3. For this wacky code, what is printed if we replace `????` in each case (use diagram)?

```
webster = {
    "a": ["apple", "and", "ada"],
    "b": ["bike", "deBug"],
    "z": {"name": "zebra", "kind": "mammal"}
}
luny_list = [8, 9, webster]
luny_list.append(luny_list) # what?????
webster["L"] = luny_list
```

```
def foooo(everything):
    final_letter = everything[2]["z"]
    print(?????)
```

```
foooo(luny_list)
```



?????	result	?????	result
<code>luny_list[1]</code>		<code>luny_list[3][1]</code>	
<code>webster["a"][-1]</code>		<code>everything[3][3][3][2]["z"]["kind"]</code>	
<code>webster["z"]["name"]</code>		<code>final_letter["name"][-1]</code>	
<code>webster["L"][1]</code>		<code>luny_list[3][-1][3][-1][3][-1][3][-1][0]</code>	
<code>luny_list[2]["b"][1]</code>		<code>webster["L"][2]["L"][2]["L"][2]["L"][1]</code>	