

# Dictionaries

## (Spring 2020 March 16th 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:

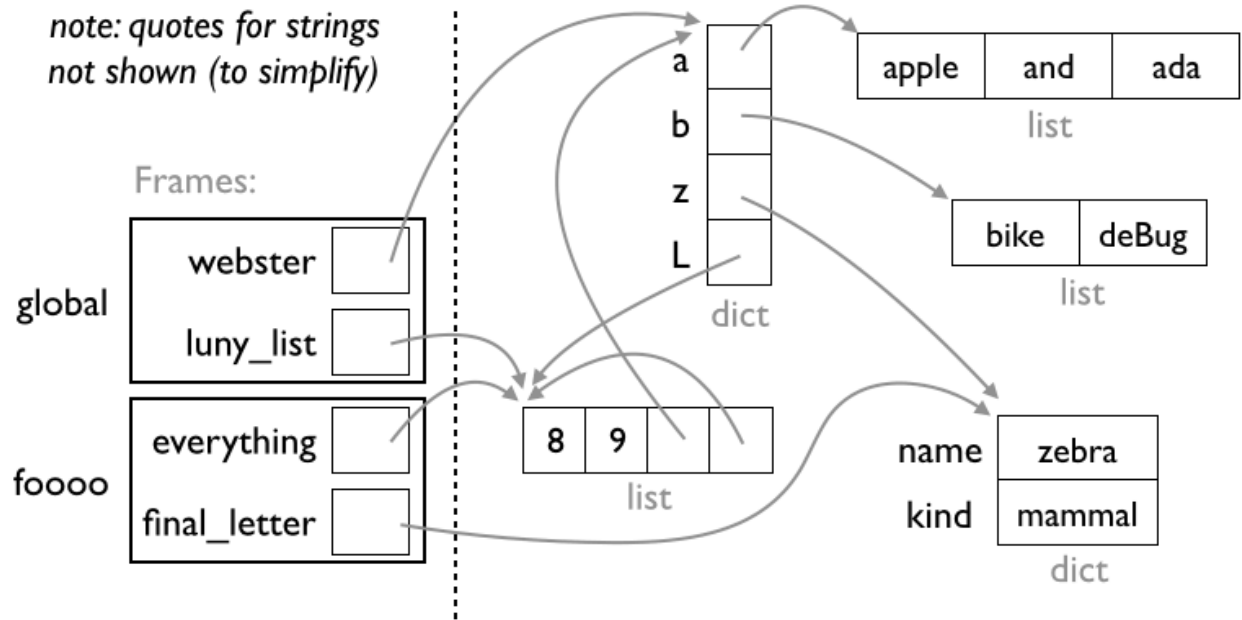
```
person = {}
person['name'] = 'Adalbert Gerald Soosai Raj'
person['age'] = 30
person['isAlive'] = True
person['phone'] = [
    {'type': 'office', 'number': '608-123-4567'},
    {'type': 'home', 'number': '608-987-6543'}
]
person['address'] = {'street': '1210 West Dayton Street',
                 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

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

| Expression     | Type | Expression        | Type |
|----------------|------|-------------------|------|
| person         |      | person['isAlive'] |      |
| person['name'] |      | person['phone']   |      |
| person['age']  |      | person['address'] |      |

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
```



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