

Dictionaries

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
color_code['red']	
color_code['black']	
color_code['#00FF00']	
color_code[2]	

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 code, what is printed if we replace **????** with the corresponding expression?

```
airbnb = [
{"name":"A", "rm_id":837, "date":"10/20/2021","reviews":[""]},
{"name":"B", "rm_id":389, "date":"01/04/2022",
    "reviews":["*", "", "***"]},
{"name":"C", "rm_id":108, "date":"05/10/2021",
    "reviews":["***", "***"]},
{"name":"D", "rm_id":237, "date":"12/25/2021","reviews":["*"]},
{"name":"E", "rm_id":278, "reviews":["***", "***", "***"]},
]

print(????)
```

????	result	????	result
airbnb[1]		len(airbnb[2]["reviews"])	
airbnb[-1]["name"]		airbnb[4]["reviews"][-1][0] + "s"	
airbnb["name"]		airbnb[-6]["reviews"]	
airbnb[1]["date"][2]		airbnb[2]["reviews"].index(airbnb[1] ["reviews"][2])	
airbnb[2]["date"][6:]		airbnb[1]["reviews"][:1] + airbnb[2]["reviews"][1:]	

4. What is the output of the following code snippet?

```
result = []
for x in airbnb[1]:
    result.append(x)
result
```

5. What is the output of the following code snippet?

```
word = "Happiness"
d = dict()
for letter in word:
    if letter in d:
        d[letter] += 1
    else:
        d[letter] = 1
print(d)
```

6. Consider the following dictionary:

```
d = {}
d[0] = 'zero'
d[1] = 'one'
d[2] = 'two'
```

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

Expression	Value
1 in d	
'2' in d	
2 not in d	
'zero' in d	