

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

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

```
capitals = {'India': 'New Delhi',  
            'USA': 'Washington DC',  
            'China': 'Beijing'}  
  
for item in capitals:  
    print(item)
```

3. 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)
```

4. 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	

5. 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']	