Logic and tuple unpacking with functions

January 3, 2022

1 Logic with functions

```python
[1]: def even_num_check(number):
         return number % 2 == 0
```

```python
[2]: even_num_check(20)
```

```
[2]: True
```

```python
[3]: even_num_check(31)
```

```
[3]: False
```

```python
[5]: def even_check_list(num_list):
         for number in num_list:
             if number % 2 == 0:
                 return True
             else:
                 pass
         return False
```

```python
[6]: even_check_list([1,3,5])
```

```
[6]: False
```

```python
[7]: even_check_list([2,1,5])
```

```
[7]: True
```

```python
[8]: # to return the numbers in a list

     def even_check(num_list):
         even_numbers = []
         for number in num_list:
             if number % 2 == 0:
                 even_numbers.append(number)
             else:
                 pass
```

```
        return even_numbers
```

[9]:
```
even_check([1,2,3,4,5,6,7])
```

[9]: [2, 4, 6]

2 Function and tuple unpacking

[10]:
```
stock_prices = [('Wipro',700),('RIL',2400),('LT',1900)]
for item in stock_prices:
    print(item)
```

```
('Wipro', 700)
('RIL', 2400)
('LT', 1900)
```

[11]:
```
stock_prices = [('Wipro',700),('RIL',2400),('LT',1900)]
for scrip,price in stock_prices:
    print(scrip)
```

```
Wipro
RIL
LT
```

[12]:
```
stock_prices = [('Wipro',700),('RIL',2400),('LT',1900)]
for scrip,price in stock_prices:
    print(price + (0.1 * price))
```

```
770.0
2640.0
2090.0
```

[13]:
```
work_hours = [('A',500),('B',600),('C',800)]
def employee_check(work_hours):
    current_max = 0
    employee_of_the_month = ''
    for employee,hours in work_hours:
        if hours > current_max:
            current_max = hours
            employee_of_the_month = employee
        else:
            pass
    return(employee_of_the_month,current_max)
```

[14]:
```
employee_check(work_hours)
```

[14]: ('C', 800)

```
[15]: name,hours = employee_check(work_hours)
```

```
[16]: name
```

[16]: 'C'

```
[17]: hours
```

[17]: 800

```
[18]: name,hours,location = employee_check(work_hours)
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
~\AppData\Local\Temp/ipykernel_13020/1408970912.py in <module>
----> 1 name,hours,location = employee_check(work_hours)

ValueError: not enough values to unpack (expected 3, got 2)
```

```
[20]: item = employee_check(work_hours)
```

```
[21]: item
```

[21]: ('C', 800)

```
[ ]:
```

```
[ ]:
```