11/04/2019 Functions

```
In [1]: def scream():
             print('Hello World')
         scream()
         Hello World
         def square(num):
In [2]:
             out = num**2
             return(out)
In [3]: sq_3 = square(3)
         print(sq_3)
         9
In [4]: def square(num):
             out = num**2
             print(out)
In [8]: q = square(4)
         print("Q is " + str(q))
         16
         Q is None
In [13]: def factorial(n):
             if n>1:
                  return n*factorial(n-1)
             else:
                 return n
         fact = factorial(5)
         print(fact)
         120
In [14]: def addition(*args):
             print(args)
             return(sum(args))
In [15]: print(addition(4,5,6,7,8,9))
         print(addition(1,2))
         (4, 5, 6, 7, 8, 9)
         39
         (1, 2)
```

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```
In [16]: def proper(some text):
             some text = some text.strip()
             some_text = " ".join([word[0].upper() + word[1:] for word in some_text.spl
         it()])
             return some_text
         captain = proper("mahendra singh dhoni")
         print(captain)
         Mahendra Singh Dhoni
In [17]:
         string_to_list = lambda x: x.split()
         print(string_to_list(captain))
         print(type(string_to_list))
         ['Mahendra', 'Singh', 'Dhoni']
         <class 'function'>
In [18]: product = lambda x, y : x*y
         print(product(3,4))
         12
In [9]: def say(message, times = 1):
             print(message * times)
         say('Hello')
         say('World', 5)
         Hello
         WorldWorldWorldWorld
In [12]:
         min = (lambda x, y: x if x < y else y)
         min(101*99, 102*98)
Out[12]: 9996
```