assignment_2

May 12, 2020

[13]:
```
def myreduce(n):
    f = 1
    for i in n:
        f = f*i
    return f
lst = [1,2,3,4,5]
myreduce(lst)
```

[13]: 120

[12]:
```
from functools import reduce

l = [1,2,3,4,5]

reduce(lambda x,y:x*y, l)
```

[12]: 120

[16]:
```
from functools import reduce

l = [1,2,3,4,5]

reduce(lambda x,y:x+y, l)
```

[16]: 15

[17]:
```
def myreduce(n):
    f = 0
    for i in n:
        f = f+i
    return f

myreduce(l)
```

[17]: 15

[18]:
```
l = [4,5,6,7,8,6,7,8,8]

list(filter(lambda x:x%2 == 0,l))
```

[18]:
```
[4, 6, 8, 6, 8, 8]
```

[19]:
```
l = [4,5,6,7,8,6,7,8,8]

def myfilter(n):
    lst = []
    for i in n:
        if i%2 == 0:
            lst.append(i)
    return lst

myfilter(l)
```

[19]:
```
[4, 6, 8, 6, 8, 8]
```

[27]:
```
[i.upper() for i in list('acadgild')]
```

[27]:
```
['A', 'C', 'A', 'D', 'G', 'I', 'L', 'D']
```

[68]:
```
[i*j for i in list('xyz') for j in range(1,5)]
```

[68]:
```
['x', 'xx', 'xxx', 'xxxx', 'y', 'yy', 'yyy', 'yyyy', 'z', 'zz', 'zzz', 'zzzz']
```

[63]:
```
[i*j for j in range(1,5) for i in list('xyz')]
```

[63]:
```
['x', 'y', 'z', 'xx', 'yy', 'zz', 'xxx', 'yyy', 'zzz', 'xxxx', 'yyyy', 'zzzz']
```

[149]:
```
[[j] for i in range(2,5) for j in range(i,i+3)]
```

[149]:
```
[[2], [3], [4], [3], [4], [5], [4], [5], [6]]
```

[10]:
```
[j for i in range(2,6) for j in range(i,i+4)]
```

[10]:
```
[2, 3, 4, 5, 3, 4, 5, 6, 4, 5, 6, 7, 5, 6, 7, 8]
```

[182]:
```
[(j,i) for i in range(1,4) for j in range(1,4)]
```

[182]:
```
[(1, 1), (2, 1), (3, 1), (1, 2), (2, 2), (3, 2), (1, 3), (2, 3), (3, 3)]
```

[208]:
```
def longestWord(n):

    x = ",".join(n)
```

```
    y=x.replace(","," ")

    return y

test = ['I','am','taking','a','python','trying']
longestWord(test)
```

[208]:
```
'I am taking a python trying'
```

[3]:
```
class findArea():
    def __init__(self,a,b,c):
        self.a = a
        self.b = b
        self.c = c

    def sol(self):
        s = (self.a + self.b + self.c)/2
        area = (s*(s-self.a)*(s-self.b)*(s-self.c)) ** 0.5
        return area

triangle = findArea(12,22,16)
triangle.sol()
```

[3]:
```
93.67496997597597
```

[5]:
```
def filter_long_words(lst,n):
    for i in range(len(lst)):
        if len(lst[i]) > n:
            print(lst[i])


listofwords = ['dfg','ddgfdfghs','sdrgsdfgsdfg','rg','dfgd','sgsga']

filter_long_words(listofwords,4)
```

```
ddgfdfghs
sdrgsdfgsdfg
sgsga
```

[1]:
```
list_words = ['dfgds','fgfd','dfgggg','df','s']
def findlen(n):
    return len(n)

list(map(findlen,list_words))
```

[1]:
```
[5, 4, 6, 2, 1]
```

[4]:
```
list_words = ['dfgds','fgfd','dfgggg','df','s']

list(map(lambda n:len(n),list_words))
```

[4]:
```
[5, 4, 6, 2, 1]
```

[52]:
```
a = input("please enter a alphabet : ").lower()
b = ['a','e','i','o','u']
def find_vowel(a):

    for i in range(len(b)):
        if a == b[i]:
            return True
            break
    else:
        return False

find_vowel(a)
```

```
please enter a alphabet : E
```

[52]:
```
True
```

[ ]:
```

```