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Lambda functions are typically used, while invoking those functions which take as arguments.

Ex: filter, map, reduce etc...

filter

The filter is usefull for taking a collection of data and removing any information that you dont need
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```
#Even and Odd number using lambda
number = lambda x : True if x % 2 == 0 else False
even = number(4) #which are divisible by 2
print(even)
odd = number(5) #which are not divisible by 2
print(odd)

Output
True
False
```

```
#Even and Odd number using lambda and filter()
#In list duplicates are allowed
lst = [0,1,2,3,4,5,6,7,8,9,0,1,2,3]

#filter() Take two parameters, lambda and sequence
result = filter(lambda x: x%2 == 0,lst)
result = list(filter(lambda x: x%2 == 0,lst))
print(result) #prints only even numbers

Output
[0, 2, 4, 6, 8, 0, 2]
```

```
Not for Explanation
#string.split(separator, maxsplit)
stduent1 = "1, Hari, Python, Pyhton"
stduent2 = "2, Hari, Python, Pyhton"
x = stduent1.split(', ')[0]
y = stduent1.split(', ')[1]
z = stduent1.split(', ')[2]
print(x)
print(y)
print(z)
print(stduent1.split(', ')[2] == stduent2.split(', ')[2])
Output
1
Hari
Python
True
```

```
Not for Explanation
#filter()
students = ['1, Hari, Python',
'2, Mahi, Python',
'3, Mani, Java',
'4, Sunny, Python'
print(students)
['1, Hari, Python', '2, Mahi, Python', '3, Mani, Java',
'4, Sunny, Python']
print(students [0])
1, Hari, Python
print(students [1])
2, Mahi, Python
print(students [2])
3, Mani, Java
print(students [3])
4, Sunny, Python
#split(separator, maxsplit)
courses = filter(lambda user: user.split(',')[2] ==
'Python', courses)
x = list(males)
print(x)
Output
 ['1, Hari, Python', '2, Mahi, Python', '4, Sunny, Python']
```