

filter

The filter is useful for taking **data and removing** any information that you don't need

The filter function **returns a sequence** from those **elements for which returns True**

#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 using lambda function and filter() with function

```
def d1(x):
```

```
    return x % 2 == 0
```

```
lst = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 1, 2, 3]
```

```
result = filter(lambda x: x % 2 == 0, lst)
```

```
print(list(result)) # [0, 2, 4, 6, 8, 0, 2]
```

Output

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