|  |
| --- |
| 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 |

|  |
| --- |
| #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] |

|  |
| --- |
| #Even and Odd number using lambda and filter() with function  def **oddNumbers**(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)  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'] |