```python
#1.print all even numbers upto 100 using list comprehension
'''
list1=[x for x in range(1,101) if x%2==0]
print(list1)


output:
[2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32,
 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62,
 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100]
'''
#2.print vowels in a given string using list comprehension
'''
l=['a','e','i','o','u']
s='apple'
list2=[x for x in s if x in l]
print(list2)


output:
['a', 'e']
'''
#3.print absolute for all values given in a list using  map function
'''
l3=[0,-1,3,4.5,-67,23,-4.7,5]
res=list(map(abs,l3))
print(res)


output:
[0, 1, 3, 4.5, 67, 23, 4.7, 5]
'''
```

#4.sort sublist of a given list using lambda function

'''

l4=[[1,4,3],[3,4,5],[2,3,4]]

sort1=lambda x:(sorted(i) for i in x)

print(list(sort1(l4)))

output:

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

'''

#5.print all sting in a given list with first letter captial using map and lambda function

'''

l=["ram","sam","tom"]

k=list(map(lambda a:a.capitalize(),l))

print(k)

output:

['Ram', 'Sam', 'Tom']

'''

#6.print all numbers divisible by 5 in a given list of elements using filter function

'''

l=[5,8,10,15,4,60,9,45,30]

def div1(i):

    if i%5==0:

      return i

res=list(filter(div1,l))

print(res)

output:

[5, 10, 15, 60, 45, 30]

'''

#7.print sum of all numbers divisible by 5 using reduce function

'''

```python
import functools

l=[5,8,10,15,4,60,9,45,30]

def div1(i):
    if i%5==0:
        return i

res=list(filter(div1,l))

print(functools.reduce(lambda a,b:a+b,res))
```

output:

165

'''

#8.find max element in list using reduce and lambda functions

'''

```python
import functools

l=[5,8,10,15,4,60,9,45,30]

print("max element in list :",end=" ")

print(functools.reduce(lambda a,b:a if a>b else b,l))
```

output:

max element in list : 60

'''

#9.print sum of 2 matrices using list comprehension

'''

```python
l1=[[1,4,3],[3,4,2],[2,3,4]]

l2=[[1,2,3],[4,5,6],[1,5,4]]

result=[[l1[i][j]+l2[i][j] for j in range(len(l1[0]))] for i in range(len(l1))]
```

print(result)

output:

[[2, 6, 6], [7, 9, 8], [3, 8, 8]]

'''

#10.print length of all strings in a list using map

'''

l=['jagadeesh','sandeep','vamsi']

print(list(map(lambda i:len(i),l)))

output:

[9, 7, 5]

'''