List Interview coding questions:

1.Program to find the max, min number from the list user input.

```
listlang = []
numbers = int(input('enter the number of items in list '))


for num in range(numbers):
    item = int(input('Entered number '))

    listlang.append(item)
print('entered list =',listlang)

print("Max number = :", max(listlang), "\nMin number :", min(listlang))
```

Output

```
enter the number of items in list 4
Entered number 12
Entered number 34


Entered number 45
Entered number 67

entered list = [12, 34, 45, 67]
Max number = : 67

Min number : 12
```

2. Code to remove duplicate from list using List comprehension

```
lstnum = [12, 36, 56, 36, 36, 50, 56, 12]

unique_lst = []
[unique_lst.append(ele) for ele in lstnum if ele not in unique_lst]

print ("unique elements list  : " ,unique_lst)
```

Output

```
unique elements list  :  [12, 36, 56, 50]
```

3. Program to find the sum of list elements.

```
lstnum = [12, 36, 56, 36, 36, 50, 56, 12]

sum = 0

for ele in range(0, len(lstnum)):
    sum = sum + lstnum[ele]

print ("sum of list items: " ,sum)
```

Output

```
sum of list
items  :  294
```

4. How to Multiply all the elements of list

```
lstnum = [6, 2, 3, 1, 10, 4]
mutiply =1;
for ele in lstnum:
  mutiply =  mutiply* ele

print ("multiplication of list items  : " ,mutiply)
```

Output

```
multiplication of list items  :  1440
```

5.Program to generate a number list between two ranges.

```
listnum = list(range(1, 7))

print ("list between two range : " ,listnum)
```

Output

```
list between two range :  [1, 2, 3, 4, 5, 6]
```

6.How to reverse the List using slice

```
listnum = [45,67,12,14,56,87]
reverselist =listnum[::-1]


print ("reverselist : " ,reverselist)
```

Output

reverselist : [87, 56, 14, 12, 67, 45]

7.How to flatten a list of lists with a list comprehension

```
listnum = [[5,6,7,'C#'],
['C++',2,3]]

flatten_list = [ele for sublist in listnum for ele in sublist]

print('flatten list =',flatten_list)
```

Output

flatten list = [5, 6, 7, 'C#', 'C++', 2, 3]

8.How to Intersect two list

```
listnum = ['C++',2,3,6,7,5,'C#']
listnum1 = ['C++',5,6,7,'C#']

intersect_res = [item for item in listnum if item in listnum1]

print('intersect of two list =',intersect_res)
```

Output

intersect of two list = ['C++', 6, 7, 5, 'C#']

9.Program to shuffle a list and print

```
from random import shuffle
listnum = ['Rust','go','C++',2,3,6,7,5,'C#']

shuffle(listnum)


print('list after shuffling =',listnum)
```

Output

list after shuffling = [6, 5, 'go', 'C#', 2, 3, 'Rust', 7, 'C++']

10. Program to convert a list into string

```
listlang = ['This','is','list','Code']
listtostring = ' '.join(listlang)
```

```
print('list after shuffling =',listtostring)
```

Output

list after shuffling = This is list Code

11.How to get the square of each list element between two range

```
listnum = list(range(3,9))

list_item_square = [ele ** 2 for ele in listnum]

print(list_item_square)
```

Output

[9, 16, 25, 36, 49, 64]

12. Program to get the difference between two List using comprehension

```
lstnum = [15, 78, 4]
lstnum1 = [80, 4, 89]

two_list_differnce = [ele for ele in lstnum if ele not in lstnum1]


print(two_list_differnce)
```

Output

[15, 78]

13. How to count the number of list in list of list.

```
lstlng = [[15, 78, 4],['C#',80,7],['Go','Rust','C++'],['Python',12]]

print('count of list of list = ',len(lstlng))
```

Output

count of list of list = 4

14. How to get the first element from each nested list of a list

```
lstlng = [[15, 78, 4],['C#',80,7],['Go','Rust','C++'],['Python',12]]
each_list_element = [item[0] for item in lstlng]

print('first element of each nested list  = ',each_list_element)
```

Output

first element of each nested list = [15, 'C#', 'Go', 'Python']

15. How to count occurrence of repeated element in list

```
from collections import Counter
lstlng = [15, 18, 14,'C#',18,15,'C#','C++','C++','Python',15]

repeation_of_element = Counter(lstlng)
print(
repeation_of_element)
```

Output

```
Counter({15: 3, 18: 2, 'C#': 2, 'C++': 2, 14: 1, 'Python': 1})
```

not working

this also working

```
print ([ [l, lst.count(l)] for l in set(lst)])
```

16. How to Filter even values from a list using list comprehension

```
lstnum = [12, 18, 14,18,15,6]


even_element_list = [ele for ele in lstnum if ele%2 == 0]


print('even item list
=',even_element_list)
```

Output

```
even item list = [12, 18, 14, 18, 6]
```

17.How to Sort a list of integers in descending order

```
lstnum = [12, 18, 14,25,15,6]

lstnum.sort(reverse=True)

print('list sorting in descending order =',lstnum)
```

Output

```
list sorting in descending order = [25, 18, 15, 14, 12, 6]
```

18.How to Sort a list of integers in ascending order

sort() method used to sort the list in ascending order.

```
lstnum = [12, 18, 14,25,15,6]

lstnum.sort()
```

```
print('list sorting in ascending order =',lstnum)
```

Output

```
list sorting in ascending order = [6, 12, 14, 15, 18, 25]
```

19. How to remove elements in a list before a specific index

```
lstnum = [12, 18, 14,25,15,6]

new_list = lstnum[4:]

print('removinfg  element before specific Index =' ,new_list)
```

Output

```
removing  element before specific Index = [15, 6]
```

20.How to remove empty strings from the list of strings

```
liststr = ["Python", "", "list", "first", "", "example"]

lstafter_remove_empty = list(filter(None,
liststr))

print(lstafter_remove_empty)
```

Output

```
['Python', 'list', 'first', 'example']
```

21.How to sort two lists simultaneously

```
lstnum = [ 5,2, 1, 7,26]
lstnum1 = [45,35, 78, 80, 100]

lstnum, lstnum1 = zip(*sorted(zip(lstnum, lstnum1)))
```

Output

```
print(lstnum, lstnum1)
```

Output

```
(1, 2, 5, 7, 26) (78, 35, 45, 80, 100)
```

23.How to concatenate two list element wise/index-wise.

```
lststr = ["th", "i", "Pyth", "exa"]
lststr1 = ["is", "s", "on", "mple"]
concate_list = [i + j for i, j in zip(lststr, lststr1)]
print('concatenated list = ',concate_list)
```

Output

```
concatenated list =  ['this', 'is', 'Python', 'example']
```

24. How to concatenate every element across lists using list comprehension

```
lststr = ["this",  "Python"]
lststr1 = ["is", "example", "of"]
templst = [(x, y) for x in lststr for y in lststr1]

concate_list = [x + ' ' + y for (x, y) in templst]

print('concatenated
list = ',concate_list)
```

Output

```
concatenated list =  ['this is', 'this example', 'this of', 'Python is', 'Python
example', 'Python of']
```

25.How to remove negative values from a list with the filter function

```
lstnum = [-5, 27, 1000, -4, 0, -80,56,-67]
//Removing negative values

res_lst = [item for item in lstnum if item >= 0]
print('list after removing negative values =',res_lst)
```

```
Output
list after removing negative values = [27, 1000, 0, 56]
```