

```
In [40]: #Task1
str = "371072875339021027987979982208375902465101357402504637693767749
sum(map(int, str))
```

Out[40]: 22660

```
In [41]: str[-10:]
```

Out[41]: '4330331690'

```
In [43]: #Task2
# importing functools for reduce()
import functools

# initializing list
lis=list(range(1,501))
#print(lis)

cubes_sum=functools.reduce(lambda x,y: x+y**y,lis)

last10=cubes_sum%(10**10)
print(last10)
```

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```
In [49]: #Task 3
# importing itertools module
import itertools

# creating a list numbers
l = [2, 1, 2, 3, 1, 3, 2, 1, 3, 3, 1, 3, 2, 3, 1, 2, 1, 3, 2, 3]

# sorting the list numbers
l = sorted(l)

print("key", " grouped result set")

# grouping the values and printing the key and grouped result set
for key, group in itertools.groupby(l):
    print(key, " ", list(group))
```

```
key  grouped result set
1    [1, 1, 1, 1, 1, 1]
2    [2, 2, 2, 2, 2, 2]
3    [3, 3, 3, 3, 3, 3, 3]
```

In []: