

## ASSIGNMENT 3.1

### Problem Statement 1:

Write a Python Program to implement your own myreduce() function which works exactly like Python's built-in function reduce().

OUTPUT: Here we have made a my\_func() function calculate the sum of the list like reduce function as shown.

```
In [2]: k=[2,4,5,2,54,23,3]
```

```
In [3]: import functools
l=functools.reduce(lambda a,b : a+b ,k)
print(l)
```

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```
In [4]: def my_func(list1):
        t=len(list1)
        sum=0
        for i in range (0,t):
            sum=sum+list1[i]
        print(sum)

my_func(k)
```

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## Problem Statement 2:

Write a Python program to implement your own myfilter() function which works exactly like Python's built-in function filter()

OUTPUT: Here we have made a my\_func2() function to filter out even numbers and print odd numbers of the list like filter function as shown.

```
In [6]: result = filter(lambda x: x % 2, k)
        print(list(result))
```

```
[5, 23, 3]
```

```
In [8]: def myfunc2(list2):
        t=len(list2)
        res=[]
        for i in range(0,t):
            if(list2[i]%2 !=0):
                res.append(list2[i])
        print(list(res))

        myfunc2(k)
```

```
[5, 23, 3]
```