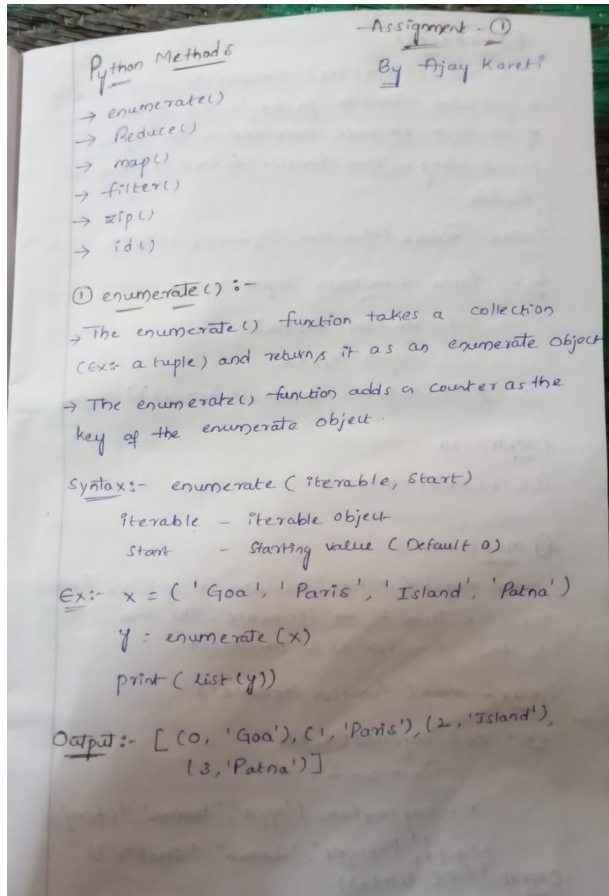
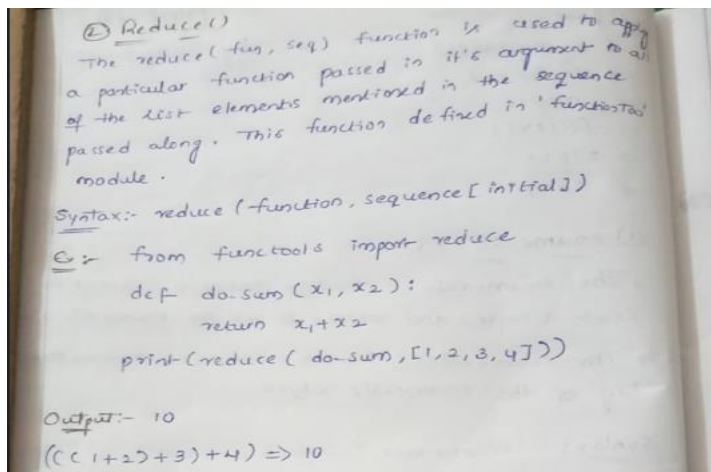


Python: Assignment-1



```
In [1]: x=('Goa','Paris','Island','Patna')
        y=enumerate(x)
        print(list(y))
```

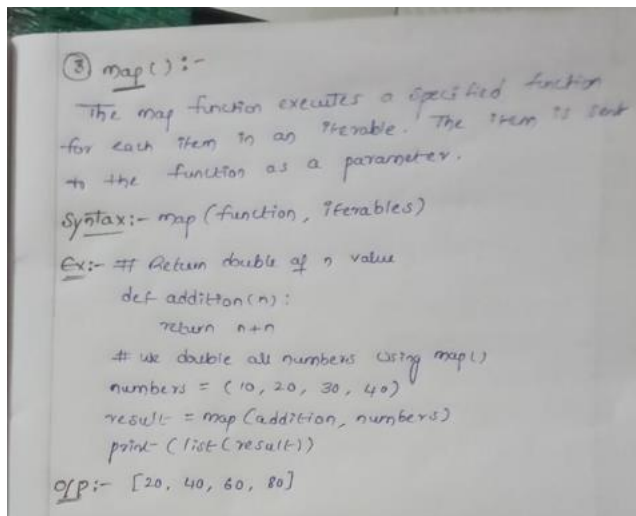
```
[(0, 'Goa'), (1, 'Paris'), (2, 'Island'), (3, 'Patna')]
```



```
In [4]: from functools import reduce
        def do_sum(x1,x2):
            return x1+x2
        print(reduce(do_sum,[1,2,3,4]))
```

```
10
```

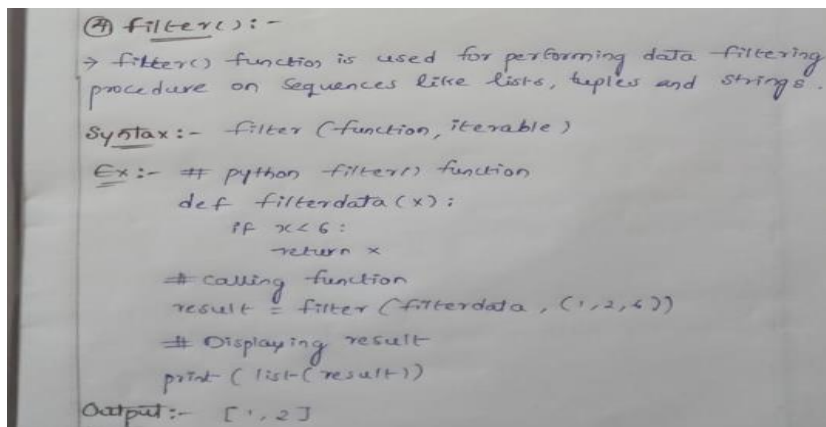
Python: Assignment-1



```
In [13]: # Return double of n
def addition(n):
    return n + n

# We double all numbers using map()
numbers = (10, 20, 30, 40)
result = map(addition, numbers)
print(list(result))

[20, 40, 60, 80]
```



```
In [18]: # Python filter() function example
def filterdata(x):
    if x<6:
        return x
# Calling function
result = filter(filterdata,(1,2,6))
# Displaying result
print(list(result))

[1, 2]
```

Python: Assignment-1

⑤ zip():-

The `zip()` function returns a `zip` object, which is an iterator of tuples where the first item in each passed iterator is paired together, and then the second item in each passed iterator are paired together etc.

If the passed iterables have different lengths, the iterable with the least items decides the length of the new iterator.

Syntax:- `zip(iterator 1, iterator 2, iterator 3, ...)`

Ex:-
`a = ("John", "Kumar", "Prathap")`
`b = ("Michel", "Roy", "Priya", "Kajol")`

`x = zip(a, b)`

`print(tuple(x))`

Output:-

`(('John', 'Michel'), ('Kumar', 'Roy'), ('Prathap', 'Priya'))`

```
In [10]: a=("John","Kumar","Prathap")
          b=("Michel","Roy","Priya","Kajol")
          X=zip(a,b)
          print(tuple(X))

          (('John', 'Michel'), ('Kumar', 'Roy'), ('Prathap', 'Priya'))
```

⑥ id():-

→ The `id()` function returns a unique id for the specified object.

→ All objects in python has it's own unique id.

Syntax:- `id(Object)`

Ex:- `x = ('Car', 'Bike', 'Plane')`

`y = id(x)`

`print(y)`

Output:- 22646607066944

every time changes. This is the memory address.

```
In [11]: X=('Car','Bike','Plane')
          y=id(X)
          print(y)
```

2822999750272

Python: Assignment-1