

code: CSA0R10

subject: python programming

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## ASSIGNMENT-4

We can calculate the factorial of n numbers & store them in a dictionary in python.

factorial of n numbers:

```
def fact(n):  
    if n == 0:  
        return 1  
    else:  
        return n * fact(n-1)  
  
n_values = [1, 2, 3, 4, 5]  
factorial_dict = {}  
  
for n in n_values:  
    factorial_dict[n] = fact(n)  
  
print(factorial_dict)
```

In this code:

- \* we define a 'factorial' function to find factorial of a number.
- \* we create a list 'n\_values' containing numbers for which you want to calculate factorial.
- \* we initialize empty dictionary 'factorial\_dict'
- \* we iterate through values in 'n\_value', calculate the factorials using function & store the result in 'factorial\_dict'.
- \* finally, we print the 'factorial\_dict' to see the dictionary values.

output:

factorial of n numbers.

{1: 1, 2: 2, 3: 6, 4: 24, 5: 120}