

Unit -1 CHALLENGE

CHALLENGE 1:

Implement a recursive function to calculate the factorial of a given number.

```
def fact(n):  
    if n == 0:  
        return 1  
    else:  
        return n * fact(n-1)  
print (fact(0))  
print (fact(5))
```

Output : 1

CHALLENGE 2:

Write a program that determines whether a year entered by the user is a leap year or not using if-elif-else statements.

```
n = int(input("Enter the year"))  
if (y % 4 == 0):  
    print ("Leap year")
```

```
else:  
    print ("Not a Leap year")
```

Output : Enter the year 2012
Leap year.