

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

```
def fact_rec(n):
```

```
    if n==0 or n==1:
```

```
        return 1
```

```
    else:
```

```
        return n*fact_rec(n-1)
```

```
number =int(input("Enter a given  
number:"))
```

```
res=fact_rec(number )
```

```
print("The factorial of {} is  
{}.".format(number,res))
```

```
# Leapyear
```

```
def isLeapYear(year):
```

```
if (year % 4 == 0 and year % 100 !=0)  
or year % 400 ==0:
```

```
    return True
```

```
else:
```

```
    return False
```

```
year=int(input("Enter a year :"))
```

```
if isLeapYear(year):
```

```
    print('{} is a leap year.'.format(year))
```

```
else:
```

```
    print('{} is a not leap  
year.'.format(year))
```