```
# Leap year

"""
year % 4 == 0 &
year % 100 ! =0 /
year% 400 ==0

"""
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 not a leap
year.'.format(year))
```

```
#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 = 2
res =fact_rec (number)

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