```python
1  #implement a recursive function to
   calculate the factorial of a given
   number
2
3  def fact_rec(n):
4      if n==0 or n==1:
5          return 1
6      else:
7          return n*(fact_rec(n-1))
8
9  number=2
10 res = fact_rec(number)
11
12 print("the factorial of{}is
   {}".format(number,res))
```
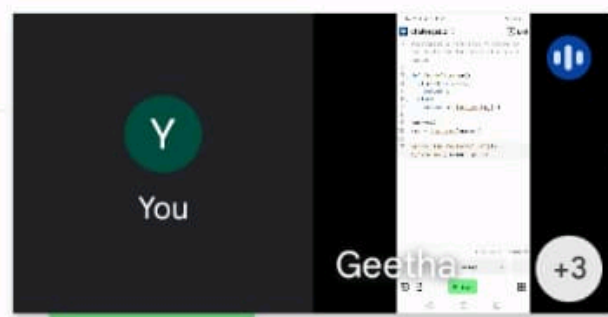
```
the factorial of2is 2
>
```

Run

```python
#Leap year

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))
```

▶ Run

```
enter a year.2023
2023 is not a leap year.
>
```

Run