```
#program to find longest populaous city
population={'bangalore':120,'mysore':234132,'madikeri':23455}
count=0
for k,v in population.items():
    if count<=v:
        count=v
        city=k
print(city)

#program to create a list of numbers &display the odd and even no,
numbers=[2,3,4,6,8,10,46,57,35,98]
odd=[]
even=[]
for i in numbers:
    if i%2==0:
        even.append(i)
    else:
        odd.append(i)
print('Total number of even no.s in a list is '+ str(len(even)))
print('Total number of odd no.s in a list is '+ str(len(odd)))



#program to count longest word in sentences
message='hii this1 is me T am VERY happy because i am GOT the job in good123
company  12345 so i will gave the party tommorrow'
message1=message.split(' ')
print(message1)
c=''
upper=[]
lower=[]
digits=[]
for i in message1:

    if len(c)<=len(i):
        c=i
for i in message1:
    if i.islower():
        lower.append(i)
for i in message1:
    if i.isupper():
        upper.append(i)
for i in message1:
    if i.isdecimal():
        digits.append(i)
print('The longest word is '+c)
print('The length is '+ str(len(c)))
print('The total number of words is : '+ str(len(message1))+' number of lower
case letters '+str(len(lower))+'number of upper case letters '+str(len(upper)))
print('number of digits'+str(len(digits)))


#program to add complex numbers
class complex:
```

```
    '''
    attributes:real,imaginary
    '''
    def __add__(self,other):
        com=complex()
        com.real=self.real+other.real
        com.imaginary=self.imaginary+other.imaginary
        return com
    def __mul__(self,other):
        com=complex()
        com.real=self.real*other.real
        com.imaginary=self.imaginary*other.imaginary
        com.imaginary=self.imaginary+other.imaginary
        return com
    def __str__(self):
        return '(%g,%g)'%(self.real,self.imaginary)
complex1=complex()
complex1.real=123
complex1.imaginary=234
com2=complex()
com2.real=986
com2.imaginary=123
print(complex1+com2)
print(complex1*com2)


#program to print time
class time:
    '''
    attributes:hour,minute,second
    '''
    def __init__(self,hour=0,minute=0,sec=0):
        self.hour=hour
        self.minute=minute
        self.second=sec
    def print_time(t):
        print('%.2d:%.2d:%.2d' % (t.hour,t.minute,t.second))
t=time(12,3,45)

t.print_time()




#program to ,use datetime to gets the current date and prints the day of the
week
 import datetime
>>> today=datetime.datetime.today()
>>> today
datetime.datetime(2023, 3, 4, 16, 57, 52, 786908)
>>> today.weekday()
5
```