```
#1.
print("Answer 1")

def ecurs(n):#calculate An for n An=a(n-1)+a(n-2)...
    if n==0:
        return 0
    if n==1:
        return 1
    if n==2:
        return 1
    else:
        return ecurs(n-1)+ecurs(n-2)+2*(ecurs(n-3))
print(ecurs(24))

#2.
print("Answer 2")
def Recurgcd(a, b):#get two int calculate gcd
    low = min(abs(a), abs(b))
    high = max(abs(a), abs(b))

    if low == 0:
        return high
    elif low == 1:
        return 1
    else:
        return Recurgcd(low, high%low)
print(Recurgcd(1,3))
#3.
print("Answer 3")
def power(a,b):#get 2 int, a positive, calculate a**a
    if b==0:
        return 1
    elif b==1:
        return a
    elif b<0:
        return power(a,b+1)/a
    else:
        return a*power(a,b-1)
print (power(4,20))

#4.
print("answer 4")
def sum_list(lst,length):#get list and lenght, return the sum
    if length==0:
        return lst[0]
    elif length > len(lst)-1:
        return print ("Your list length exceeded the real list length")
    else:
        return lst[length]+sum_list(lst, length-1)
lst= [1,2,3,4,5]
print(sum_list(lst,4))

#5.
print("Answer 5")
def abc(string):#Dictionary games
    L=string.split(",")
    print (L)
    myDict = {}
    for k in "abcdefghijklmnopqrstuvwxyz":
        myDict[k]=[]
    for word in L:
        myDict[word[0]].append(word)

    return myDict


string1="wer,wrw,fwf,wf,wfqrf,wqfrefre,qrfqf"
aaa = abc(string1)
print ((aaa))

#6.
print("Answer 6")
def DictToList(Dict):#continue dictionary games
    L1=[]
    for k in "abcdefghijklmnopqrstuvwxyz":
        L1.append((len(Dict[k]),k))
    L1.sort()
    L2=[]
    for tup in L1:
        temp=(tup[1],tup[0])
        L2.append(temp)
    return L2
print (DictToList(aaa))
```