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Quiz instructions: The quiz time is 20 minutes. Use proper indentation/alignment in your code, the line of the answer sheets are formatted for this purpose.

Q.1 [50 POINTS] [Students' average needed time to solve and review is 10 MINUTES]

Write a function **q1** that prints "Pangram" if given string is a Pangram or "Not Pangram" if the given string is not a Pangram. A Pangram string is a string that contains all English alphabet at least once.

Example: if "The quick brown fox jumps over the lazy dog." is the input string, then the function prints **Pangram**.

```
def q1v1(s):
    a=list(s.lower())
    b=set()
    for i in a:
        if i.isalpha(): b.add(i)
    if len(b)==26: print('Pangram')
    else: print('Not Pangram')

def q1v2(s):
    a=list(s.lower())
    b=[]
    for i in a:
        if i.isalpha() and i not in b: b.append(i)
    if len(b)==26: print('Pangram')
    else: print('Not Pangram')

def q1v3(s):
    a=list(s.lower())
    d=dict()
    for i in a:
        if i.isalpha() and i not in d: d[i]=True
    if len(d)==26: print('Pangram')
    else: print('Not Pangram')

def main():
    s= "The quick brown fox jumps over the lazy dog."
    q1v1(s)
    q1v2(s)
    q1v3(s)

main()
```

Q.2 [50 POINTS] [Students' average needed time to solve and review is 10 MINUTES]

Write a function **q2** that receives a list and returns a list of the elements whose frequency is greater than K.

Example: If you call this function sending testList = [4, 6, 4, 3, 3, 4, 3, 4, 3, 8], and K = 3, it should return [4, 3].

```
def q2v1(x):  
    d=dict()  
    for i in x:  
        v=d.get(i,0)  
        d[i]=v+1  
    r=[]  
    for i in d:  
        if d[i]>3: r.append(i)  
    return r  
  
def q2v2(x):  
    s=set()  
    for i in x:  
        s.add(i)  
    r=[]  
    for i in s:  
        if x.count(i)>3: r.append(i)  
    return r  
  
def main():  
    x=[4, 6, 4, 3, 3, 4, 3, 4, 3, 8]  
    print(q2v1(x))  
    print(q2v2(x))  
  
main()
```