1. Write a program that accepts a sentence from the keyboard, calculate and print out each unique character and its corresponding number of occurrence. Don't count spaces. For example, if the input sentence is: *the world is beautiful!* , then the output should be the following:
Hint:
1) use index to get a character in a string
2) use dictionary to store characters and their corresponding values (# of appearance)

```
a , 1
! , 1
b , 1
e , 2
d , 1
f , 1
i , 2
h , 1
l , 2
o , 1
s , 1
r , 1
u , 2
t , 2
w , 1
```

2. Write a program that can sort a given dictionary either by key or value. The program allows users to choose operations (1: sort by key, 2: sort by value). If the given dictionary is: d={'x': 7, 'y': 2, 'a': 3, 'm': 2}, the running output is following.

```
please select operation: (1: sort by key, 2: sort by value) 1
a , 3
m , 2
x , 7
y , 2

please select operation: (1: sort by key, 2: sort by value) 2
y , 2
m , 2
a , 3
x , 7
```