Practice Question for Dictionary: -

Question1: **Get keys ['name', 'age'] from the given dictionary student_details = {'name': 'kirti','age':18,'location':'Bengal','Country':'Indian'} and create new dictionary?**

Answer1: **student_details = {'name': 'kirti','age':18,'location':'Bengal','Country':'Indian'}**

```
new_dict = {key: student_details[key] for key in ['name', 'age']}
print(new_dict)
```

Question2: Program to delete set of keys from Dictionary.

Answer2: **student_details = {'name': 'kirti','age':18,'location':'Bengal','Country':'Indian'}**

```
new_dict = {key:student_detials[key] for key in student_details.keys()-['name','age']}
print(new_dict)
```

Question3: Program to change the name of key in dictionary

Answer3:

```
employee_details = {
        'name': 'bob',
        'age': 70,
        'profession': 'Teacher',
        'city': 'Kolkata'
}
student_details['name_of_employe'] = student_details.pop('name')
print(student_details)
```

Question4: Program to change the value of any key in nested dictionary.

Answer4: employee_details = {

‘Employee1’:{

‘name’: ‘bob’,

‘age’: 45,

‘profession’: ‘writer’,

‘city’: ‘banaras’

},

‘Employee2’:{

‘name’: ‘walter’,

‘age’: 40,

‘profession’: ‘singer’,

‘city’: ‘kolkata’

},

‘Employee3’: {

‘name’: ‘cathy’,

‘age’:25,

‘profession’: ‘CEO’,

‘city’: ‘mumbai’

}

}

employee_details[‘Employee3’][‘name’] = ‘Banner’

print(employee_details)

Question5: Program to sort a dictionary.

Answer5:

```
original_dict = {'name': 'bob', 'age':'25', 'place': 'bangalore'}

sorted_dict = {key : value for key, value in sorted(original_dict.items(),key =
lambda item: item[1],reverse = True)}
print(original_dict)
print(sorted_dict)
```

Question6: Explain with example the properties of a dictionary.

Question7: What is the difference between del, clear(),pop(key) and popitem. Explain with example.

Question8: What will be the output of the following code?

```
a = {}

a[1]=1
a['1'] = 2
a[1] = a[1]+1
count = 0
for i in a:
    count +=a[i]
print(count)
```

Answer8: 4 (explain why?)

Question9: What will be the output of the given program.

```
numbers = {}
letter = {}
comb = {}
numbers[1]=10
numbers[6]= 16
letter['first']= 'Python'
comb['Numbers'] = numbers
comb['Letters'] = letter

print(comb)
```

Answer9: {'Numbers': {1: 10, 6: 16}, 'Letters': {'first': 'Python'}}

Note: This is an example of how two dictionaries can merge.

Question10: WAP in python to make a dictionary whose key is only a perfect number and the value is a strong number based on user defined term.