



1. Dict + 3, Dict * 3, Dict + {3: "3"}, Dict.update("3": 3)

2. 'Kolkata'

3. No because key ~~is~~ ^{list values} has ~~tuple~~ and keys cannot be of mutable data type.

4. 5: num

num num num

a: String

String String String

(1, 2): tuple

tuple tuple tuple

5) my_points = {'a': (4, 3), 'b': (1, 2), 'c': (5, 1)}

maxi = 0

for i in my_points.values():

if i[0] > maxi:

maxi = i[0]

print("Maximum value at index (my_points, 0) = ", maxi)

maxi = 0

for i in my_points.values():

if i[1] > maxi:

maxi = i[1]

print("Maximum value at index (my_points, 1) = ", maxi)

6) ~~perimeter~~ ~~for~~ ~~function~~

d = eval(input("Enter Teacher: Subject pair"))

sub = input("Enter the subject: ")

teacher = []

for i in d.values():

~~if~~ ~~sub~~ ~~==~~ ~~sub~~:

teacher.append(i)



```

print("Teachers handling", sub, ":", l)

7. countries = eval(input("Enter countries: "))
   capitals = eval(input("Enter capitals: "))
   diction = dict(zip(countries, capitals))
   while True:
       search = input("Enter the country: ")
       print(diction.get(search, 'not available'))
       if search == 'end':
           print("Quitting...")
           break

```

8. Statement 1 does not give error.

```
{1:111, 2:0, 3:333, 4:444}
```

Statement 3 does not work since dictionary cannot be concatenated by '+' operator.
(Type Error)

```
{1:111, 2:0, 3:333, 4:444} + {5:555, 6:666}
```

9. {'corn': 25, 'tomato': 49}

10. False

July

hot

Summer: hot

winter: cold

December: cold

June: hot



DATE _____

```
11. print(""" ***** MENU ***** """)
1. ADD STUDENT
2. MOD STUDENT
3. DEL STUDENT
4. DISPLAY
5. EXIT """)
students = {}
while True:
    choice = int(input("Enter choice: "))
    if choice == 1:
        admin = int(input("Enter admission number: "))
        details = eval(input("Enter details: "))
        students[admin] = details
    if choice == 2:
        admin = int(input("Enter admission number: "))
        print("Details: ", students.get(admin, "invalid"))
        if admin in students:
            newmarks = eval(input("Enter new marks: "))
            students[admin][3] = newmarks
    if choice == 3:
        admin = int(input("Enter admin no.: "))
        del(students[admin])
        if admin in students:
            del(students[admin])
            print("Deleting ...")
            print("Successfully deleted")
        else:
            print("invalid admission number: ")
    if choice == 4:
        grade = int(input("Enter grade: "))
        section = input("Enter choicesection: ")
        for i in students:
            if students[i][2] == section and students[i][3] == 11:
```



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```
total = sum(students[i][3])
avg = total/5
print(student[i], '\t', 'Total =',
total, 'Average =', avg)
else:
    print("No student in", grade, "
    section")
if choice == 5:
    print("Quitting program...")
    break
```