**DICTIONARY CONCEPT**

**INPUT :-**

# concept 'dictionary'.  
# ex:- dict={key1:value1,key2:value2}  
blader = {1:'tyson',2:'kai',4:'max',3:'ray',5:'diachi',6:'hilari'}  
print("dictionary: ",blader,type(blader), id(blader))  
print("best blader: ",blader[1],"\nstrongest blader: ",blader.get(2))  
# get() ===> takes only key.  
print("unknown: ",blader.get(10,'not found'),"\tknown: ",blader.get(6,'not found'))  
blader[6]='madoka'  
print("updated dictionary: ",blader,"\tlength of the dictionary: ",len(blader))  
blader['world']='beyblade'  
print("items added to dict: ",blader)  
student = {'mounav':'it','keerthi':'civil','sasi':'it1','kumar':'ece','dhruthi':'eie'}  
print("student dict: ",student,"\tstudent type: ",type(student))  
print("length of the student: ",len(student))  
# delete item from dict  
student.pop('dhruthi') # takes only one argument.  
print("decresed student: ",student,"\tlength of the student: ",len(student))  
del student['keerthi']  
print(student,"\t",len(student))  
college = {1:'vrsec',2:'pvp',3:'lrbr',4:'vit'}  
bit = {'tyson':'dragoon','kai':'dranzer','max':'dracial','ray':'drigger'}  
print(college,bit)  
college.clear()  
print("cleared college: ",college)  
del bit  
print("deleted")  
# nested dictionary.  
student1 = {'mounav':{'roll':22,'branch':'it'},'mohith':{'roll':46,'branch':'ece'}}  
print("nested student: ",student1,type(student1))  
print("accesing the items: ",student1['mounav'],"\tmounav rollno: ",student1['mounav']['roll'])  
print("accesing nested dict: ",student1['mohith']['branch'])  
student2 = student1.copy()  
print("student2 dict: ",student2,type(student2))  
# using fromkeys()===> takes two arguments.  
keyset=('key1','key2','key3')  
dictionary1 = dict.fromkeys(keyset)  
print("without value: ",dictionary1)  
dictionary2 = dict.fromkeys(keyset,50)  
print("with value: ",dictionary2)  
# using items()===> returns key-value pair.  
print("key-value pairs: ",blader.items())  
# using key()===> it returns all the keys from the dictionary  
print("keys of the blader are: ",blader.keys())  
# using values()===> it returns values of the dictionary.  
print("values of the blader are: ",blader.values())  
# using setdefault()  
print("student dictionary: ",student)  
x = student.setdefault('mounav')  
print("branch is: ",x)  
student.setdefault('dhruthi')  
print("dictionary student: ",student)  
student.setdefault("vamsi","eie")  
print("added student dictionary: ",student)  
print("updated student info: ",student)  
student.update({'dhruthi':'eie'})  
print("updated student info: ",student)

**OUTPUT :-**

**C:\Users\prave\PycharmProjects\sai45\venv\Scripts\python.exe "C:/Users/prave/PycharmProjects/sai45/DICTIONARY concept.py"**

**dictionary: {1: 'tyson', 2: 'kai', 4: 'max', 3: 'ray', 5: 'diachi', 6: 'hilari'} <class 'dict'> 1921600515648**

**best blader: tyson**

**strongest blader: kai**

**unknown: not found known: hilari**

**updated dictionary: {1: 'tyson', 2: 'kai', 4: 'max', 3: 'ray', 5: 'diachi', 6: 'madoka'} length of the dictionary: 6**

**items added to dict: {1: 'tyson', 2: 'kai', 4: 'max', 3: 'ray', 5: 'diachi', 6: 'madoka', 'world': 'beyblade'}**

**student dict: {'mounav': 'it', 'keerthi': 'civil', 'sasi': 'it1', 'kumar': 'ece', 'dhruthi': 'eie'} student type: <class 'dict'>**

**length of the student: 5**

**decresed student: {'mounav': 'it', 'keerthi': 'civil', 'sasi': 'it1', 'kumar': 'ece'} length of the student: 4**

**{'mounav': 'it', 'sasi': 'it1', 'kumar': 'ece'} 3**

**{1: 'vrsec', 2: 'pvp', 3: 'lrbr', 4: 'vit'} {'tyson': 'dragoon', 'kai': 'dranzer', 'max': 'dracial', 'ray': 'drigger'}**

**cleared college: {}**

**deleted**

**nested student: {'mounav': {'roll': 22, 'branch': 'it'}, 'mohith': {'roll': 46, 'branch': 'ece'}} <class 'dict'>**

**accesing the items: {'roll': 22, 'branch': 'it'} mounav rollno: 22**

**accesing nested dict: ece**

**student2 dict: {'mounav': {'roll': 22, 'branch': 'it'}, 'mohith': {'roll': 46, 'branch': 'ece'}} <class 'dict'>**

**without value: {'key1': None, 'key2': None, 'key3': None}**

**with value: {'key1': 50, 'key2': 50, 'key3': 50}**

**key-value pairs: dict\_items([(1, 'tyson'), (2, 'kai'), (4, 'max'), (3, 'ray'), (5, 'diachi'), (6, 'madoka'), ('world', 'beyblade')])**

**keys of the blader are: dict\_keys([1, 2, 4, 3, 5, 6, 'world'])**

**values of the blader are: dict\_values(['tyson', 'kai', 'max', 'ray', 'diachi', 'madoka', 'beyblade'])**

**student dictionary: {'mounav': 'it', 'sasi': 'it1', 'kumar': 'ece'}**

**branch is: it**

**dictionary student: {'mounav': 'it', 'sasi': 'it1', 'kumar': 'ece', 'dhruthi': None}**

**added student dictionary: {'mounav': 'it', 'sasi': 'it1', 'kumar': 'ece', 'dhruthi': None, 'vamsi': 'eie'}**

**updated student info: {'mounav': 'it', 'sasi': 'it1', 'kumar': 'ece', 'dhruthi': None, 'vamsi': 'eie'}**

**updated student info: {'mounav': 'it', 'sasi': 'it1', 'kumar': 'ece', 'dhruthi': 'eie', 'vamsi': 'eie'}**

**Process finished with exit code 0**