#1 access andprint the age of one person using their name

people={"john":25,"vicky":34,"micheal":40,"sophia":28,"william":35}

name="vicky"

age=people.get(name)

if age:

print(f"{name} is {age} years old.")

else:

print(f"none")

OUTPUT: PS C:\Users\jebin\OneDrive\Desktop\pythonworks> & C:/Users/jebin/AppData/Local/Programs/Python/Python312/python.exe c:/Users/jebin/OneDrive/Desktop/pythonworks/collection/dictionary/dictionary\_task/#1names\_ages.py

vicky is 34 years old.

PS C:\Users\jebin\OneDrive\Desktop\pythonworks>

#2  merge two dictionaries

a={"product":"apple","price":1200}

b={"quantity":"2kg","piece":30}

a.update(b)

print(a)

merged={\*\*a,\*\*b}

print(merged)

output: on312/python.exe c:/Users/jebin/OneDrive/Desktop/pythonworks/collection/dictionary/dictionary\_task/#2merge\_two\_dict.py

{'product': 'apple', 'price': 1200, 'quantity': '2kg', 'piece': 30}

{'product': 'apple', 'price': 1200, 'quantity': '2kg', 'piece': 30}

#3 calculate average score

students={"vipin":41,"jack":62,"jebin":98}

total=0

for i in students:

    total +=students[i]

    average=total/len(students)

    print(average)

output:

PS C:\Users\jebin\OneDrive\Desktop\pythonworks> & C:/Users/jebin/AppData/Local/Programs/Python/Python312/python.exe c:/Users/jebin/OneDrive/Desktop/pythonworks/collection/dictionary/dictionary\_task/#3average\_score.py

13.666666666666666

34.333333333333336

67.0

PS C:\Users\jebin\OneDrive\Desktop\pythonworks>

#4 dictionary comprehension

#

squares\_dict={num: num\*\*2 for num in range(1,11)}

print(squares\_dict)

output: ython/Python312/python.exe c:/Users/jebin/OneDrive/Desktop/pythonworks/collection/dictionary/dictionary\_task/#4squares\_nos.py

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100}

PS C:\Users\jebin\OneDrive\Desktop\pythonworks>

#5 lists of keys and values

keys=['apple','banana','cherry']

values=['red','yellow','pink']

   #dictionary comprehension

fruit\_colors = {key: value for key, value in zip(keys,values)}

print(fruit\_colors)

output:

ython312/python.exe c:/Users/jebin/OneDrive/Desktop/pythonworks/collection/dictionary/dictionary\_task/#5dict\_comprehension.py

{'apple': 'red', 'banana': 'yellow', 'cherry': 'pink'}

PS C:\Users\jebin\OneDrive\Desktop\pythonworks>

#6 list of fruits and prices

fruits=['apple','banana','cherry']

prices=[100,50,250]

  #dictionary comprehension

fruit\_prices={fruit: price for fruit, price in zip(fruits,prices)}

print(fruit\_prices)

output:

C:/Users/jebin/AppData/Local/Programs/Python/Python312/python.exe c:/Users/jebin/OneDrive/Desktop/pythonworks/collection/dictionary/dictionary\_task/#6dict\_comprehension.py

{'apple': 100, 'banana': 50, 'cherry': 250}

PS C:\Users\jebin\OneDrive\Desktop\pythonworks>

#original dictionary data

data={'A':30,'B':75,'C':20,'D':60,'E':90,'E':90,'F':40}

filtered\_data={key:value for key,value in data.items() if value>50}

print("original dictionary:")

print(data)

print("\nfiltered dictionary:")

print(filtered\_data)

output: PS C:\Users\jebin\OneDrive\Desktop\pythonworks> & C:/Users/jebin/AppData/Local/Programs/Python/Python312/python.exe c:/Users/jebin/OneDrive/Desktop/pythonworks/collection/dictionary/dictionary\_task/#7values\_greaterthan\_50.py

original dictionary:

{'A': 30, 'B': 75, 'C': 20, 'D': 60, 'E': 90, 'F': 40}

filtered dictionary:

{'B': 75, 'D': 60, 'E': 90}

PS C:\Users\jebin\OneDrive\Desktop\pythonworks>

#8sentence="this is a test sentence this sentence is just a test"

def count\_word\_frequencies(sentence):

    words=sentence.split()

    word\_frequencies={}

    for word in words:

        if word in word\_frequencies:

            word\_frequencies[word]+=1

        else:

            word\_frequencies[word]=1

            return word\_frequencies

        sentence="this is a test sentence,This sentence is just a test."

        print(count\_word\_frequencies(sentence))

output

#original dictionary

data={'A':-10,'B':20,'C':-30,'D':40,'E':-50}

absolute\_data={key:abs(value) for key,value in data.items()}

print("original dictionary:")

print(data)

print("\nAbsolute value dictionary:")

print(absolute\_data)

output:

PS C:\Users\jebin\OneDrive\Desktop\pythonworks> & C:/Users/jebin/AppData/Local/Programs/Python/Python312/python.exe c:/Users/jebin/OneDrive/Desktop/pythonworks/collection/dictionary/dictionary\_task/#9absolute\_values.py

original dictionary:

{'A': -10, 'B': 20, 'C': -30, 'D': 40, 'E': -50}

Absolute value dictionary:

{'A': 10, 'B': 20, 'C': 30, 'D': 40, 'E': 50}

PS C:\Users\jebin\OneDrive\Desktop\pythonworks>

10 dictionary comprehension

prices={'apple':100,"banana":50,'cherry':200,'date':80,'orange':150}

discounted\_prices={item:price \* 0.9 for item,price in prices.items()}

print("original prices:")

print(prices)

print("\nDiscounted prices:")

print(discounted\_prices)

output:

PS C:\Users\jebin\OneDrive\Desktop\pythonworks> & C:/Users/jebin/AppData/Local/Programs/Python/Python312/python.exe c:/Users/jebin/OneDrive/Desktop/pythonworks/collection/dictionary/dictionary\_task/#10discount.py

original prices:

{'apple': 100, 'banana': 50, 'cherry': 200, 'date': 80, 'orange': 150}

Discounted prices:

{'apple': 90.0, 'banana': 45.0, 'cherry': 180.0, 'date': 72.0, 'orange': 135.0}

PS C:\Users\jebin\OneDrive\Desktop\pythonworks>