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| **Netaji Subhash Engineering College**  **Department of Computer Science & Engineering**  **B. Tech CSE 2nd Year 3rd Semester**  **2023-2024**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Name of the Course: IT Workshop (Python)**  **Course Code: PCC-CS393**  **Name of the Student: ARITTRA BAG**  **Class Roll No.: 103**  **University Roll No.: 10900122105**  **Date of Experiment: 08/09/2023**  **Date of Submission: 15/09/2023**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Assignment No.: A6\_01**  **Problem Statement:**  Write a program to create a dictionary that contains (i, i\*i) such that i is an integral number between 1 and n (both included).  **Python Code:**  **n=int(input("Enter the Number: "))**  **d={}**  **for i in range(1,n+1):**  **d[i]=i\*i**  **print(f"The Dictionary is: {d}")**  **Sample Output(s):**  Enter the Number: 5  The Dictionary is: {1: 1, 2: 4, 3: 9, 4: 16, 5: 25}  **Assignment No.: A6\_02**  **Problem Statement:**  Write a program to count the numbers of characters in a string and store them in a dictionary.  **Python Code:**  **s=input("Enter the String: ").lower().replace(" ","")**  **d={}**  **for i in s:**  **d[i]=s.count(i)**  **print(f"The Dictionary is: {d}")**  **Sample Output(s):**  Enter the String: This is a String  The Dictionary is: {'t': 2, 'h': 1, 'i': 3, 's': 3, 'a': 1, 'r': 1, 'n': 1, 'g': 1}      **Assignment No.: A6\_03**  **Problem Statement:**  Write a program to create a dictionary by combining two lists ‘name’ for employee name and ‘salary’ for employee salary. Use the list ‘name’ as the key and ‘salary’ as the value of dictionary elements.  **Python Code:**  **n=int(input("Enter no. of Inputs: "))**  **d={}**  **name=[]**  **salary=[]**  **for i in range(n):**  **name.append(input(f"Enter Name-{i+1}: "))**  **salary.append(int(input("Enter Salary: ")))**  **d[name[i]]=salary[i]**  **print(f"The Dictionary is: {d}")**  **Sample Output(s):**  Enter no. of Inputs: 3  Enter Name-1: auz  Enter Salary: 10000  Enter Name-2: alpha  Enter Salary: 20000  Enter Name-3: omega  Enter Salary: 50000  The Dictionary is: {'auz': 10000, 'alpha': 20000, 'omega': 50000}  **Assignment No.: A6\_04**  **Problem Statement:**  Write a program to input player's name (string) and runs (integer) scored for n number of players where n should be input from the keyboard. Store the player’s details in a dictionary called 'cricket'. After preparing the dictionary, input the player's name and print the runs scored by the player otherwise returns'-1' if the player's name is not found.  **Python Code:**  **n=int(input("Enter No. of Players: "))**  **cricket={}**  **name=[]**  **runs=[]**  **for i in range(n):**  **name.append(input(f"Enter Name-{i+1}: ").lower().capitalize())**  **runs.append(int(input("Enter Runs: ")))**  **cricket[name[i]]=runs[i]**  **cf=cricket.keys()**  **print(f"Name of the Players is: {cf}")**  **nm=input("Enter Name: ").lower().capitalize()**  **if nm in cf:**  **print(f"{nm} has scored {cricket[nm]} Runs!")**  **else:**  **print(-1)**  **Sample Output(s):**  **Enter No. of Players: 3**  **Enter Name-1: alpha**  **Enter Runs: 59**  **Enter Name-2: omega**  **Enter Runs: 20**  **Enter Name-3: auz**  **Enter Runs: 99**  **Name of the Players is: dict\_keys(['Alpha', 'Omega', 'Auz'])**  **Enter Name: alpha**  **Alpha has scored 59 Runs!**  **Assignment No.: A6\_05**  **Problem Statement:**  Write a program to sort (ascending order) a dictionary by value.  **Python Code:**  n=int(input("Enter the no. of Elements: "))  d={}  temp={}  for i in range(n):      d[i]=int(input(f"Enter Element-{i+1}: "))  l=list(d.values())  l.sort()  c=0  for i in l:      for j in d:          if d[j]==i:              temp[c]=i              c+=1  print(f"The Sorted Dictionary is: {temp}")  **Sample Output(s):**  Enter the no. of Elements: 5  Enter Element-1: -25  Enter Element-2: 30  Enter Element-3: 90  Enter Element-4: 70  Enter Element-5: 80  The Sorted Dictionary is: {0: -25, 1: 30, 2: 70, 3: 80, 4: 90}  **Assignment No.: A6\_06**  **Problem Statement:**  Write a program to merge two dictionaries.  **Python Code:**  n1=int(input("Enter no. of terms for Dict-1: "))  d1={}  for i in range(1,n1+1):      s=input(f"Enter Key-{i} for Dict-1: ").lower()      d1[s]=int(input(f"Enter Element-{i} for Dict-1: "))  n2=int(input("Enter no. of terms for Dict-2: "))  d2={}  for i in range(1,n2+1):      s=input(f"Enter Key-{i} for Dict-2: ").lower()      d2[s]=int(input(f"Enter Element-{i} for Dict-2: "))  print(f"The Dictionary-1 is: {d1}")  print(f"The Dictionary-2 is: {d2}")  print("The Merged Dictionary is: ",{\*\*d1,\*\*d2})  **Sample Output(s):**  Enter no. of terms for Dict-1: 2  Enter Key-1 for Dict-1: a  Enter Element-1 for Dict-1: 10  Enter Key-2 for Dict-1: b  Enter Element-2 for Dict-1: 20  Enter no. of terms for Dict-2: 2  Enter Key-1 for Dict-2: b  Enter Element-1 for Dict-2: 30  Enter Key-2 for Dict-2: c  Enter Element-2 for Dict-2: 40  The Dictionary-1 is: {'a': 10, 'b': 20}  The Dictionary-2 is: {'b': 30, 'c': 40}  The Merged Dictionary is: {'a': 10, 'b': 30, 'c': 40} |