

Summer Vacation Holiday Homework(2019-20)

Subject:Computer Science

Class : XII A

1. A list contains the following elements:
3, 25, 13, 6, 35, 8, 14, 45
Write a function to swap the content with the next value divisible by 5 so that the resultant List will look like: 25, 3, 13, 35, 6, 8, 45, 14
2. Write a program to accept values from a user in a tuple. Add a tuple to it and display its elements one by one. Also display its maximum and minimum value.
3. Write a program to input any values for two tuples. Print it, interchange it and then compare them.
4. Write a Python program to input 'n' classes and names of their class teachers to store them in a dictionary and display the same. Also accept a particular class from the user and display the name of the class teacher of that class.
5. Write a program to store student names and their percentage in a dictionary and delete a particular student name from the dictionary. Also display the dictionary after deletion.
6. Write a Python program to input names of 'n' customers and their details like items bought, cost and phone number, etc., store them in a dictionary and display all the details in a tabular form.
7. Write a Python program to capitalize first and last letters of each word of a given string.
8. Write a Python program to remove duplicate characters of a given string.
9. Write a Python program to compute sum of digits of a given string.
10. Write a Python program to find the second most repeated word in a given string.
11. Write a Python program to change a given string to a new string where the first and last chars have been exchanged.
12. Write a Python program to multiply all the items in a list.
13. Write a Python program to get the smallest number from a list.
14. Write a Python program to append a list to the second list.
15. Write a Python program to generate and print a list of first and last 5 elements where the values are square of numbers between 1 and 30 (both included).
16. Write a Python program to get unique values from a list.
17. Write a Python program to convert a string to a list.
18. Write a Python script to concatenate the following dictionaries to create a new one:

d1={'A':1,'B':2,'C':3} d2={'D':4}

Output should be: ={'A':1,'B':2,'C':3,'D':4}

19. Write a Python script to check if a given key already exists in a dictionary.
20. Write a Python script to print a dictionary where the keys are numbers between 1 and 15 (both included) and the values are square of keys.

Sample Dictionary

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100, 11: 121, 12: 144, 13: 169, 14: 196, 15: 225}

21. Write a Python script to merge two Python dictionaries. Write a Python program to sort a dictionary by key.
22. Write a Python program to combine two dictionary adding values for common keys.

d1 = {'a':100,'b': 200, 'c':300} d2 = {'a':300, 'b':200, 'd':400}

Sample output: {'a':400,'b':400,'d':400,'c': 300}

23. Write a Python program to find the highest 3 values in a dictionary.
24. Write a Python program to sort a list alphabetically in a dictionary.
25. Write a Python program to count number of items in a dictionary value that is a list.