

Problem Description

The program takes a number from the user and generates a dictionary that contains numbers (between 1 and n) in the form (x,x*x).

Case 1:

Enter a number:5

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25}

Case 2:

{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, 16: 256, 17: 289, 18: 324, 19: 361}

Problem Description

The program takes a range and creates a list of tuples within that range with the first element as the number and the second element as the square of the number.

Case 1:

Enter the lower range:1

Enter the upper range:4

[(1, 1), (2, 4), (3, 9), (4, 16)]

Case 2:

Enter the lower range:45

Enter the upper range:49

[(45, 2025), (46, 2116), (47, 2209), (48, 2304), (49, 2401)]

Problem Description

The program takes a list from the user and finds the cumulative sum of a list where the ith element is the sum of the first i+1 elements from the original list.

Case 1:

Enter the number of elements in list:5

Enter element1:1

Enter element2:2

Enter element3:3

Enter element4:4

Enter element5:5
(The original list is: ', [1, 2, 3, 4, 5])
(The new list is: ', [1, 3, 6, 10, 15])

Case 2:
Enter the number of elements in list:4
Enter element1:23
Enter element2:56
Enter element3:67
Enter element4:10
(The original list is: ', [23, 56, 67, 10])
(The new list is: ', [23, 79, 146, 156])

Problem Description

The program takes a range and prints all numbers which are odd and palindromes between the range without using recursion.

Case 1:
Enter lower limit: 100
Enter upper limit: 150
The numbers are: [101, 111, 121, 131, 141]

Case 2:
Enter lower limit: 300
Enter upper limit: 400
The numbers are: [303, 313, 323, 333, 343, 353, 363, 373, 383, 393]

Problem Description

The program accepts a hyphen separated sequence of words as input and print the words in a hyphen-separated sequence after sorting them alphabetically.

Case 1:
red-green-blue-yellow
Sorted:
blue-green-red-yellow

Case 2:
Enter a hyphen separated sequence of words:
Bangalore-hyderabad-delhi
Sorted:

Bangalore-delhi-hyderabad