

## Assignment 7

Part 1:

Create a map using the double hashing algorithm where:

$$h(k) = k \bmod 29$$

$$h'(k) = 13 - k \bmod 13$$

$N = 29$  (size of the array)

Output your final map including the keys and values.

Use the following input:

18 San Clemente

41 Mission Viejo

22 Laguna Niguel

44 Irvine

Delete key 18

58 Lake Forest

32 San Diego

49 Anaheim

Delete key 58

31 Los Angeles

17 Orange

72 Palms Springs

41 Riverside

Delete key 49

19 Brea

60 Santa Ana

35 Tustin

103 Oceanside

11 La Jolla

18 Del Mar

22 Aliso Viejo

49 Laguna Beach

Delete key 41

## Assignment 7

42 Vista  
49 San Diego  
99 San Juan  
29 Dana Point  
88 El Segundo  
41 San Clemente  
62 Laguna Hills

Part 2:

Create a map using the quadratic hashing algorithm where:  
 $h(k) = k \bmod 29$

Output your final map including the keys and values.

Due March 4