

key
orange ||
blue |||
Yale blue ||||
purple |
grey |
red |
pink |
black ||
green ||

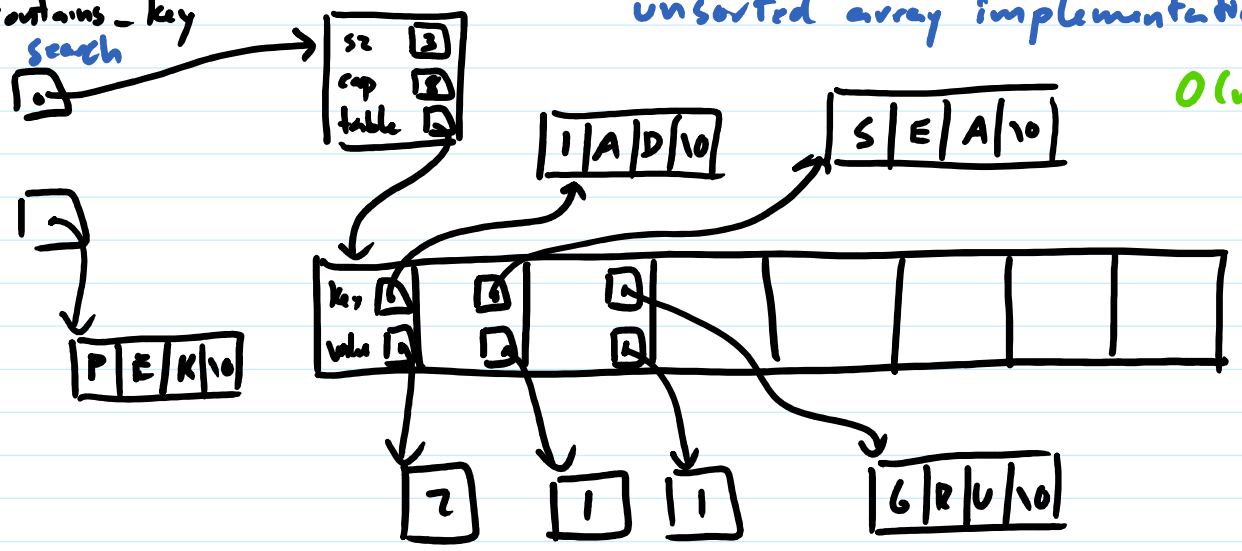
for each student
 get favorite color
 if color in map
 get old value
 add 1 to get new
 replace old with new
 else
 add color w/ value 1

Map: allows value lookups based on key
(Dictionary) check for key present
 update / add value for key

map - contains - key
sequential search
m

unsorted array implementation
 $O(n)$

key

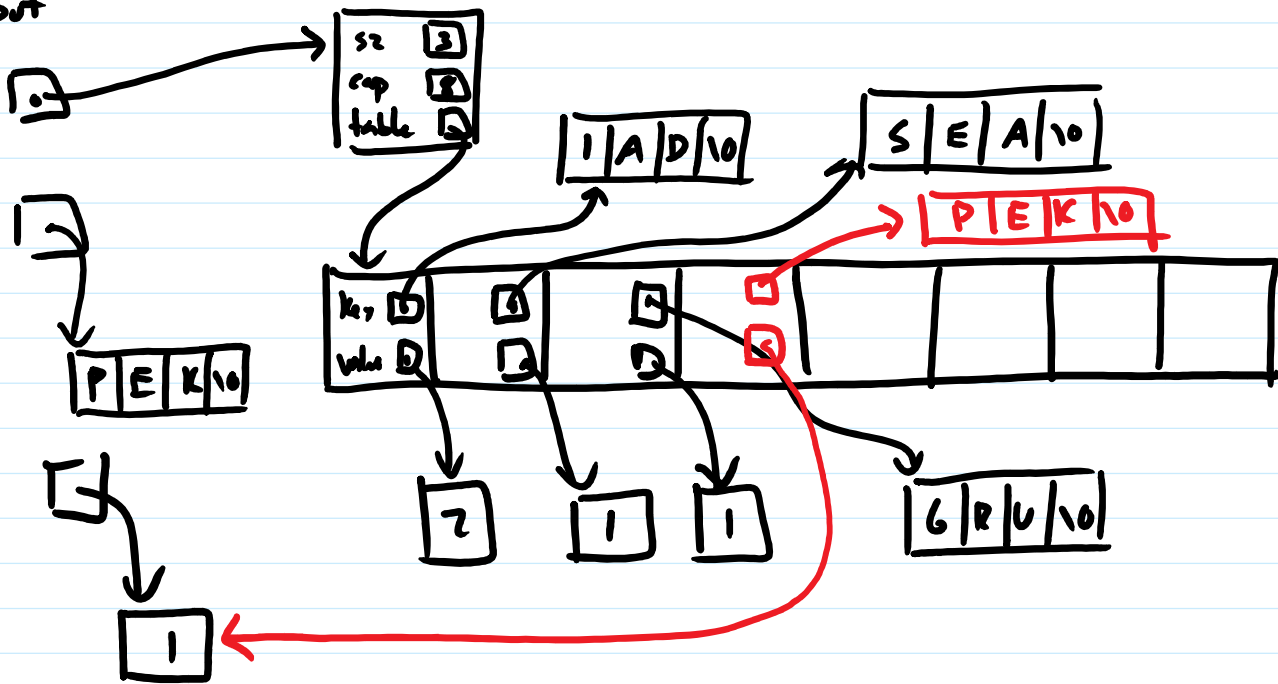


smmap-put

m

key

value



```
char * dest = malloc(4);  
strcpy(dest, "PEK");  
smmap-put(dest, 1);  
strcpy(dest, "IAD")
```

smmap-put

m [0]



key |



value



index | 3

smap - put

m

key

value



index 2

m -> table[index].value = value;

