

# Речници. Хеш таблици

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# Речници

## Речник

cat	a small animal that is related to lions and tigers and that is often kept by people as a pet
dog	canid; especially : a highly variable domestic mammal ( <i>Canis familiaris</i> ) closely related to the gray wolf

# “Номератор” на ключови думи

if	0
then	1
else	2
for	3
...	...

# Променливи на средата

```
var x = 10;  
var y = "Hello";
```

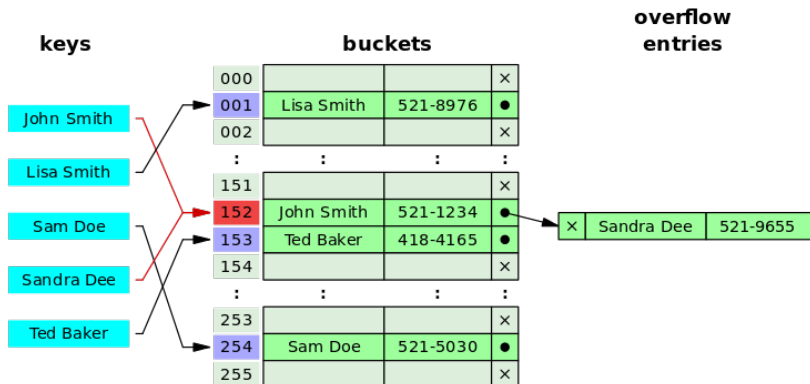
x	10
y	"hello"

```
var x = 10;  
var y = "Good_bye!";
```

x	10
y	"Good bye!"

# Хеш таблици

# Илюстрация на хеш таблица



Източник: Wikipedia

# Основни елементи

- Хеш функция

$$h : \text{Keys} \rightarrow [0; n)$$

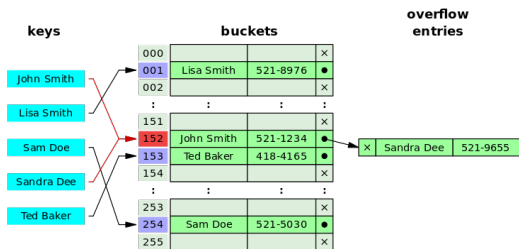
$$h(\text{"John Smith"}) = 152$$

- Колизии

$$k_1 \neq k_2, h(k_1) = h(k_2)$$

- Примерна хеш функция за низ

$$h(s) = \left| \sum_{i=0}^{\text{strlen}(s)-1} (\text{int}) s_i \right|_n$$



Източник: Wikipedia



Въпроси?