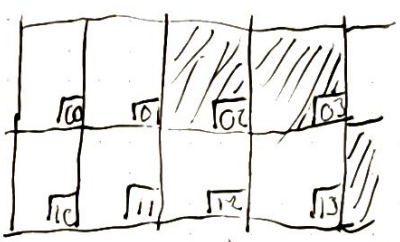
# Selection sort

Arrays works like drawers.

- Stored


This means that if 3 is occupied and you need three slots, you'll get 1, 2 and 4.
This is one of the cons. This is where linked list comes in.
With linked lists, your items can be anywhere in memory.
Each item stores the address of the next item in the list. A bunch of random memory addresses are linked together.



* you can split up data and store it seperately.

Selection Sort.

$O(n \times n)$ time or $O(n^2)$ time

- Not a fast sorting method.

function for selection sort

```
def selectionSort(arr):
  smallest = arr[0]
  smallest_index = 0
  for i in range(1, len(arr)):
    if arr[i] < smallest:
    smallest = arr[i]
    smallest_index = i
  Return smallest_index
print selectionSort([....])
```