## Problem 3.1

## File Contents

# Block 1

- <Black 33 OKC 20>
- <Chapman 44 Edmond 20>
- <Clinton 55 Tulsa 25>

(block 2 \*)

Block 2

- <Ford 66 Enid 25>
- <Grant 22 Norman 15>
- <Haas 99 OKC 20>

(block 3 \*)

# Block 3

- <Hougan 88 Yukon 25>
- <Johnson 11 Yukon 20>
- <White 77 OKC 20>

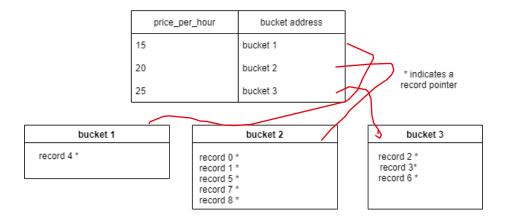
\* indicates a pointer



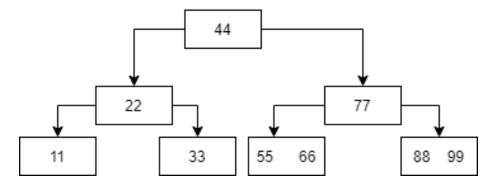
# Problem 3.2

The secondary index on "price\_per\_hour" is a candiate key, so bucket addresses will be used in the secondary index instead of block addresses

missing primary index: -3



## Problem 3.3



Without record pointers this is not an index: -1.5