Index Structures
(1) Ignore Signs
(2) Follow Signs

Nessel 1h
Birgisch 2h 35
Nessjeri

Alpe Bäll 1h 35
Belalp 1h 55
Thakkar Paresh & Parul 39 Arlington Attn 978 376-3163
Thakur Aman 3 Trailside Wy Wsd 978 392-8810
Vijay & Gwyn 10 Lady Slipper Ln Attn 978 264-4109
Thaller Kurt & Carol 10 Knowlton Dr Attn 978 263-6006
Thandapani Suresh 8 Meyer Hill Dr Attn 978 929-9567
Tharp Lisa Kauffman 10 Dunham Ln Acton 978 897-5995
Thatcher Bruce M 5 Till Dr Attn 978 635-9889
Patricia 23 Turtle Dr Acton 978 263-0205
Thatcher Photography 5 Till Dr Attn 978 929-0880
Thatcher R 102 Willow W Attn 978 263-8087
Thaure Frederic & Lisa 8 Heather Hill Rd Attn 978 263-1342
Thayer Kent & Astrid 45 Parkerville Rd Chel 978 244-9260
Wm H Jr 47 North Rd Chel 978 256-5156
Wm & Teresa 46 Sylvan Av Chel 978 256-5645
The Courtyard Condominium 360 Littleton Rd Chel 978 250-2447
The Family Eye Care Center 133 Littleton Rd Wsd 978 692-1400
The Gill Group 1 Courthouse Ln Chel 978 589-8247
The Gutierrez Co 2 Technology Pk Dr Wsd 978 263-9989
The Mill 481 Great Rd Attn 978 264-4588
The Movement Center Dance Studio
Selectivity

\[ sel := \frac{|\sigma_{a=42}(R)|}{|R|} \leq 1 \]

- **High Selectivity**
  \[ \frac{5}{10000} = 0.0005 \]

- **Low Selectivity**
  \[ \frac{1000}{10000} = 0.1 \]
High Selectivity
The “Who Needs Indexes Anyway?“ Trap

random access is expensive

disk seek
The “Who Needs Indexes Anyway?“ Trap

random access is expensive
sequential access is cheap
=> no need to selectively access data
=> no need for data structures/indexes
=> for any query: just scan the data

(plain wrong!) dangerous
10,000 sec
vs
0.05 sec
“But I have all my data in main memory!“
1 TB, 10 GB/sec

100 sec

vs

0.00000005 sec
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“Caveman Chuck” Coker
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other:
Jens Dittrich