

- *Syntax*

$$e ::= x$$
$$| \lambda x. e$$
$$| e_1 e_2$$

- Programs are *expressions* or λ -terms
- *Variable*: x, y, z

```
sepConcat :: String -> [String] -> String
sepConcat - [] = ""
sepConcat sep (x:xs) = foldLeft f x xs
  where
    f a b = a ++ (sep ++ b)
```

Var	Desc
B	the number of data pages
R	number of records per page
D	average time to read or write a disk page
F	average fanout for a non-leaf page

	Scan	Equality	Range	Insert	Delete
()					
Heap	BD	$0.5BD$	BD	$2D$	Search + D
Sorted	BD	$D \log_2 B$	$D(\log_2 B + \# \text{ matching pages})$	Search + BD	Search + BD
Clustered	$1.5BD$	$D \log_F 1.5B$	$D(\log_F 1.5B + \# \text{ matching pages})$	Search + D	Search + D
Unclust. Tree	$BD(R + 0.15)$	$D(1 + \log_F 0.15B)$	$D(\log_F 0.15B + \# \text{ matching pages})$	Search + $2D$	Search + $2D$
Unclust. Hash	$BD(R + 0.125)$	$2D$	BD	Search + $2D$	Search + $2D$