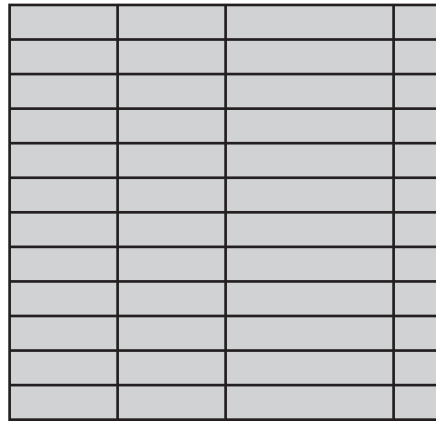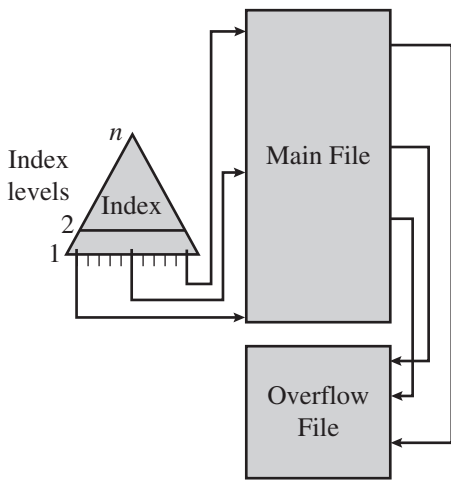Variable-length records
Variable set of fields
Chronological order

(a) Pile File
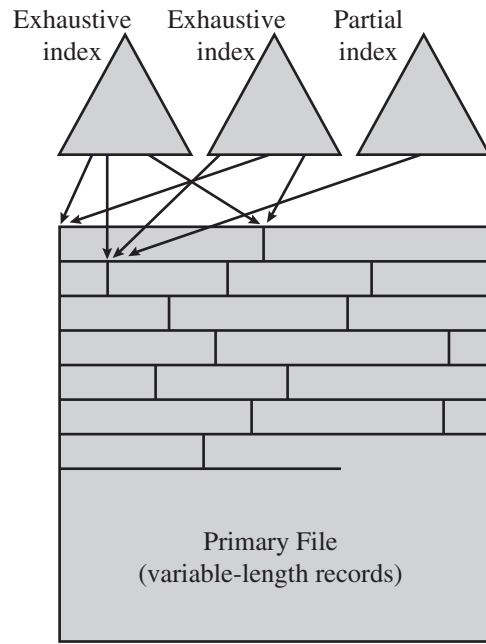
Fixed-length records
Fixed set of fields in fixed order
Sequential order based on key field

(b) Sequential File

Index levels

n

Index

2

1

Main File

Overflow File

(c) Indexed Sequential File

Exhaustive index

Exhaustive index

Partial index

Primary File
(variable-length records)

(d) Indexed File

Figure 12.3 Common File Organizations