

Storing Game Entries in an Array

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Arrays in C/C++

- Basic properties of arrays
 - Creation and deletion of a dynamic array
 - C: “malloc” (or “calloc”) and “free”
 - C++: “new” and “delete”
 - Stored in consecutive memory 連續的記憶體中
 - Easy random access: $A[i] = *(A+i)$
 - ★ • Slow for insertion and removal in the middle

example

int

要找int a[3]

就是把a的位置加3個int的長度 再取址取值

Example: Storing Game Entries in an Array

○ Requirements

- Store top-10 highest scores in an array
- Keep records of both names and scores
- Maintain records in **descending** order of scores
- Support basic functions of insertion and deletion

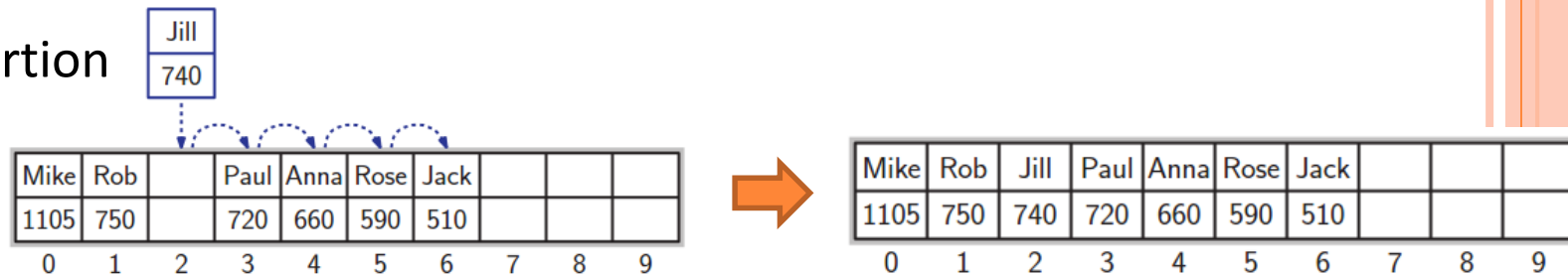
Basic Operations

Some basic operations

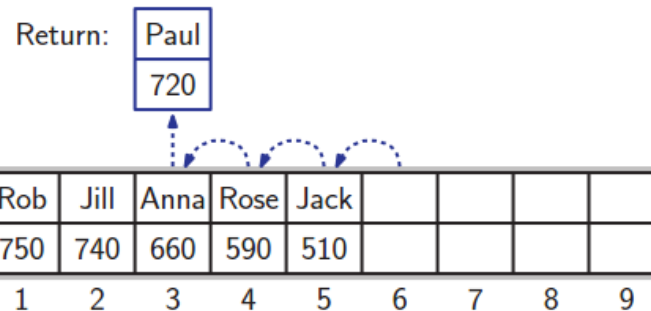
- Original

Mike	Rob	Paul	Anna	Rose	Jack				
1105	750	720	660	590	510				
0	1	2	3	4	5	6	7	8	9

- Insertion



- Removal



C++ Implementation

○ Examples

- gameScore00.cpp