Announcements

• Project #7 has been posted (Demo?)
More Big-O Examples

What is the asymptotic complexity (Big-O) for these?

• Inserting at the front of an array
• Inserting at the front (head) of a linked list
• Access the \( i^{th} \) element of an array
• Access the \( i^{th} \) element of a linked list
• Fawzi’s algorithm for staffing
Recursion: Dish Washing Example

• Demonstration with human volunteers
  • With iteration
  • With recursion

Rules for my “clone”:
  • Can’t give him the entire job
  • Must do same task as me (on subset of data)
  • Can’t work simultaneously with me

• Let’s write some code for “dish washing”
  • With iteration
  • With recursion

• What’s the running time (big-O) for these algorithms?