Mergesort Pseudo-Code

**function** merge\_sort(*node* head)

// return if empty list

**if** (head == nil)

**return** nil

**var** *node* array[32]; initially all nil

**var** *node* result

**var** *node* next

**var** *int* i

result = head

// merge nodes into array

**while** (result != nil)

next = result.next;

result.next = nil

**for**(i = 0; (i < 32) && (array[i] != nil); i += 1)

result = merge(array[i], result)

array[i] = nil

// do not go past end of array

**if** (i == 32)

i -= 1

array[i] = result

result = next

// merge array into single list

result = nil

**for** (i = 0; i < 32; i += 1)

result = merge(array[i], result)

**return** result