Universidad Francisco Marroquin

Algoritmia y Complejidad

# Guia de Estudio: parcial 1

(Cormen T.H...[et al.]). Introduction to Algorithms. Third Edition.

# **Asymptotic notation & analysis**

### 2. Getting Started

- 2.2 Analyzing Algorithms
- 2.2 Order of Growth

#### 3. Growth of Functions

• 3.1 Asymptotic notation

## **Insertion sort**

### 2. Getting Started

- 2.1 Insertion Sort
- · 2.2 Analysis of Insertion Sort

## **Heapsort**

## 6. Heapsort

- 6.1 Heaps
- 6.2 Maintaining the heap property
- 6.3 Building a heap
- 6.4 The heapsort algorithm

## Quicksort

#### 7. Quicksort

- 7.1 Description of quicksort
- 7.2 Performance of quicksort
- 7.4 Analysis of quicksort

## Mergesort

### 2. Getting Started

• 2.3.1 The divide-and-conquer approach

# **Divide and Conquer**

### 2. Getting Started

• 2.3.1 The divide-and-conquer approach

### 4. Divide-and-Conquer

- 4.3 The substitution method for solving recurrences
- 4.4 The recursion-tree method for solving recurrences
- 4.5 The master method for solving recurrences

# **Counting Sort**

## 8. Sorting in Linear Time

• 8.2 Counting Sort

## **Radix Sort**

## 8. Sorting in Linear Time

_	Q Q	Radix	Sort
•	0.3	Hauix	SOIL

Fecha de parcial: 4 de Septiembre 11:30 am