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## THEORETICAL ANALYSIS

### Basic operation is the comparison marked as (1)

#### Analyze B(n)

#### Analyze W(n)

#### Analyze A(n)

### Basic operations are the two loop incrementations marked as (2)

#### Analyze B(n)

#### Analyze W(n)

#### Analyze A(n)

### Basic operation is the assignment marked as (3)

#### Analyze B(n)

#### Analyze W(n)

#### Analyze A(n)

### Basic operations are the two assignments marked as (4)

#### Analyze B(n)

#### Analyze W(n)

#### Analyze A(n)

## IDENTIFICATION OF BASIC OPERATION(S)

*Here, state clearly which operation(s) in the algorithm must be the basic operation(s). Also, you should provide a simple explanation about why you have decided on the basic operation you choose. (1-3 sentences)*

## REAL EXECUTION

### Best Case

|  |  |
| --- | --- |
| N Size | Time Elapsed |
| 1 |  |
| 10 |  |
| 50 |  |
| 100 |  |
| 200 |  |
| 300 |  |
| 400 |  |
| 500 |  |
| 600 |  |
| 700 |  |

### Worst Case

|  |  |
| --- | --- |
| N Size | Time Elapsed |
| 1 |  |
| 10 |  |
| 50 |  |
| 100 |  |
| 200 |  |
| 300 |  |
| 400 |  |
| 500 |  |
| 600 |  |
| 700 |  |

### Average Case

|  |  |
| --- | --- |
| N Size | Time Elapsed |
| 1 |  |
| 10 |  |
| 50 |  |
| 100 |  |
| 200 |  |
| 300 |  |
| 400 |  |
| 500 |  |
| 600 |  |
| 700 |  |

## COMPARISON

### Best Case

#### Graph of the real execution time of the algorithm

#### Graph of the theoretical analysis when basic operation is the operation marked as (1)

#### Graph of the theoretical analysis when basic operation is the operation marked as (2)

#### Graph of the theoretical analysis when basic operation is the operation marked as (3)

#### Graph of the theoretical analysis when basic operation is the operation marked as (4)

#### Comments

### Worst Case

#### Graph of the real execution time of the algorithm

#### Graph of the theoretical analysis when basic operation is the operation marked as (1)

#### Graph of the theoretical analysis when basic operation is the operation marked as (2)

#### Graph of the theoretical analysis when basic operation is the operation marked as (3)

#### Graph of the theoretical analysis when basic operation is the operation marked as (4)

#### Comments

### Average Case

#### Graph of the real execution time of the algorithm

#### Graph of the theoretical analysis when basic operation is the operation marked as (1)

#### Graph of the theoretical analysis when basic operation is the operation marked as (2)

#### Graph of the theoretical analysis when basic operation is the operation marked as (3)

#### Graph of the theoretical analysis when basic operation is the operation marked as (4)

#### Comments