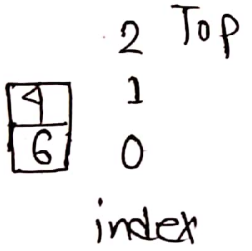
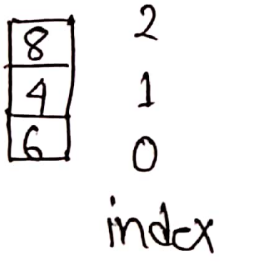
1. Push(6), Push(4), Push(8), Pop(), Push(1), Push(9), Pop(), Pop(), Push(2), Pop(), Pop()

Push(6):

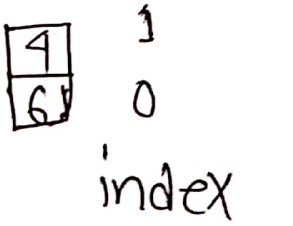
Push(4):



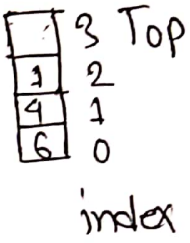

Push(8):



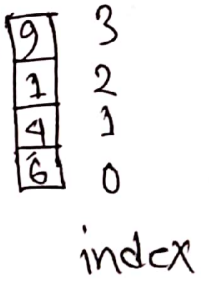

Pop():



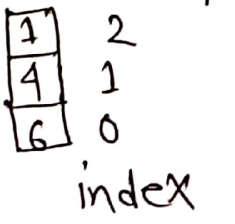

Push(1):



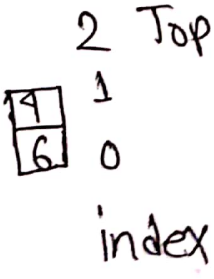

Push(9):




Pop():




Pop():

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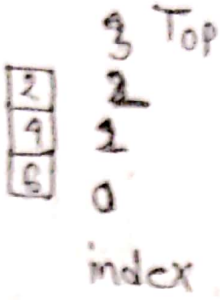
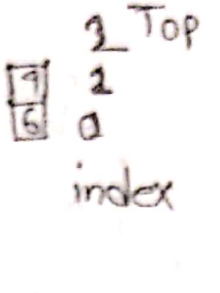
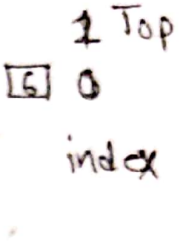
Push(2):



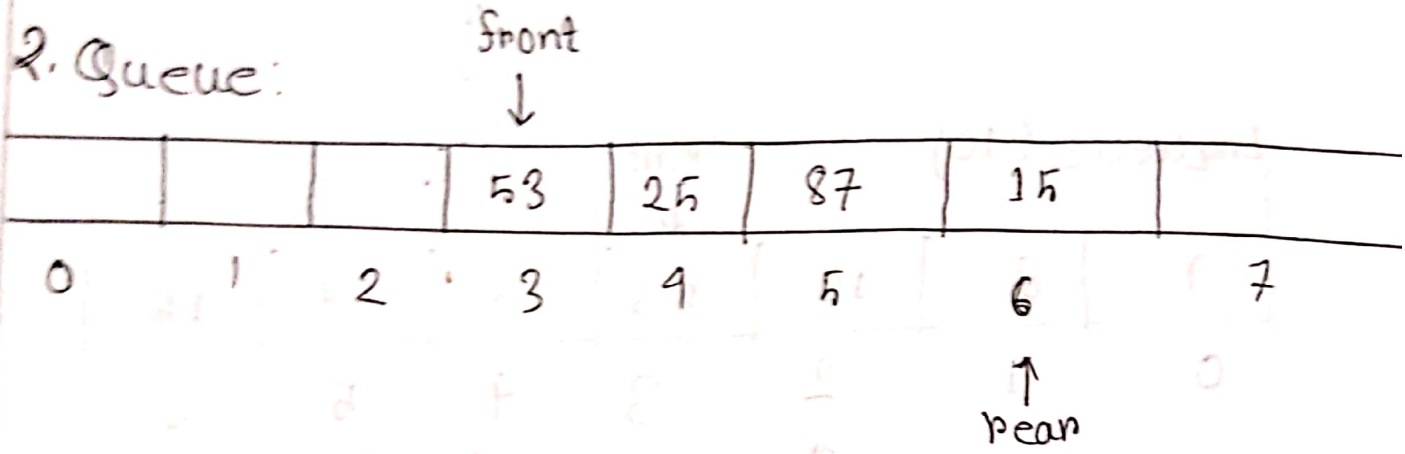

Pop():



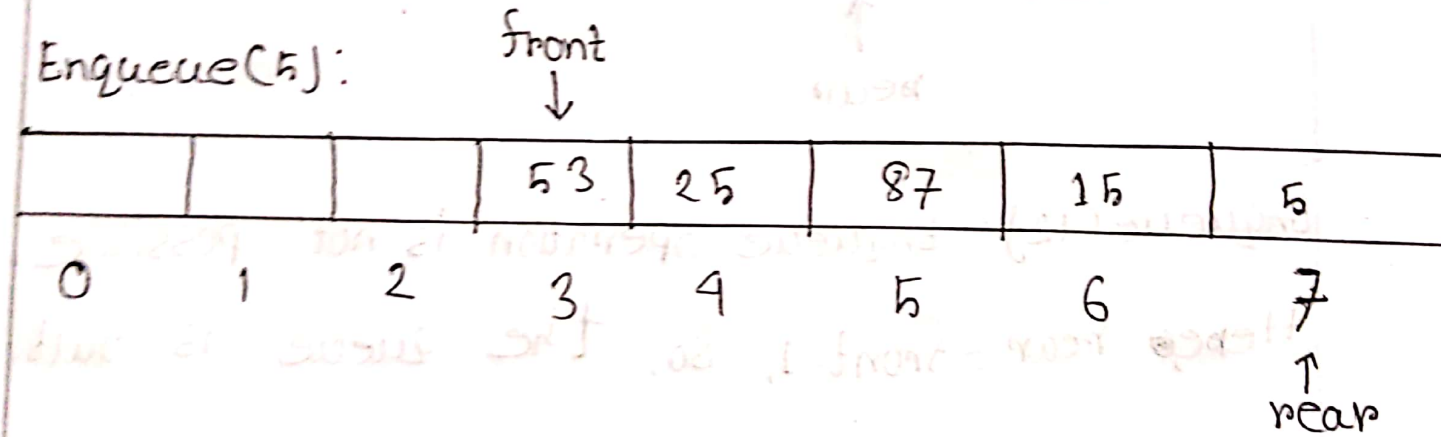

Pop():



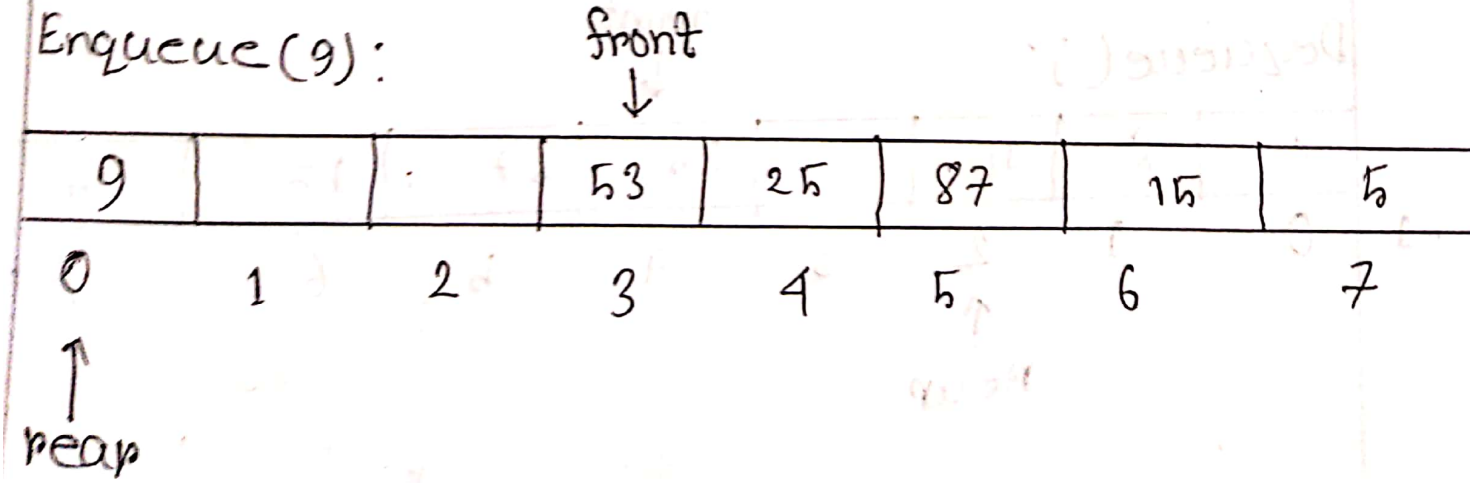

2. Queue:




Enqueue(5):




Enqueue(9):

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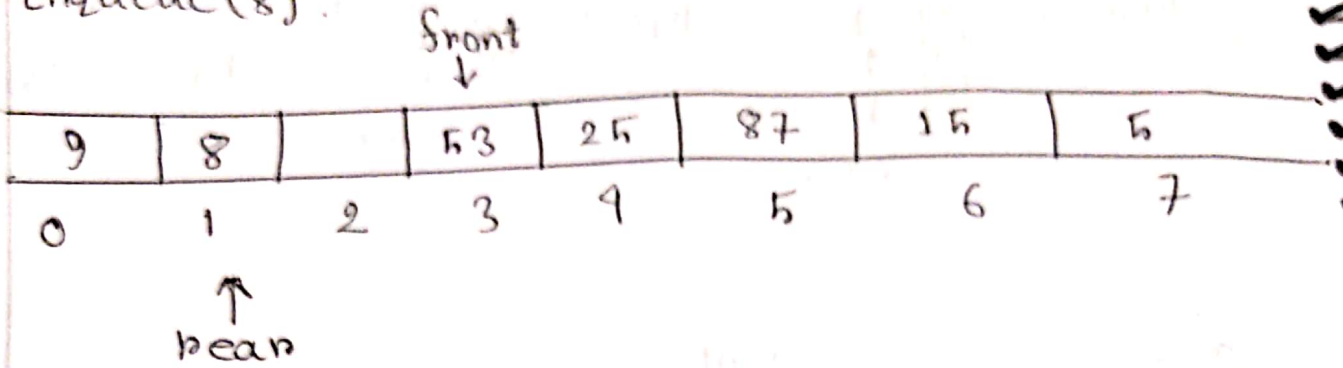
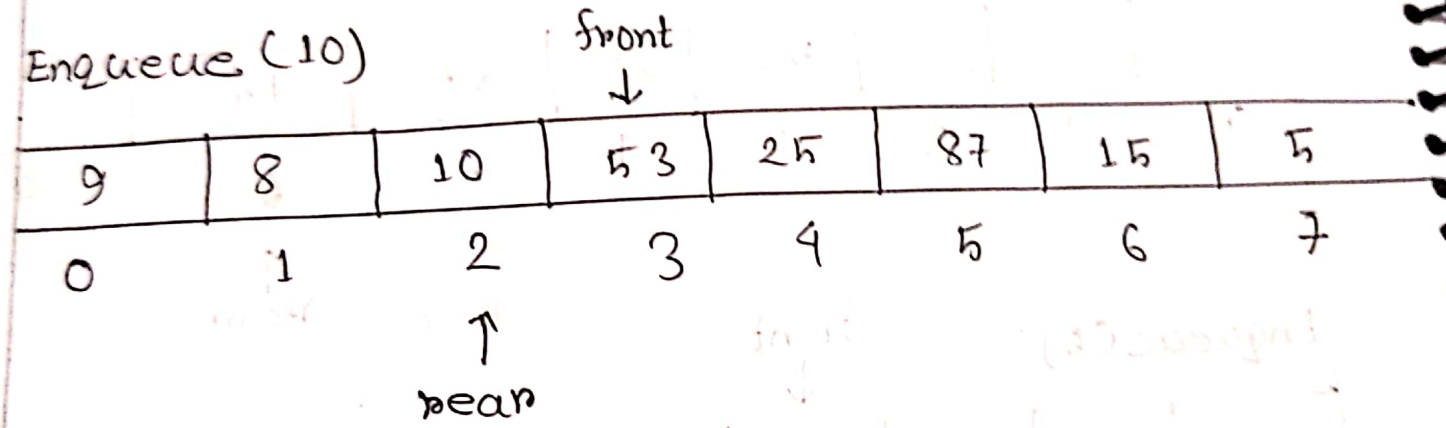
Enqueue(8):

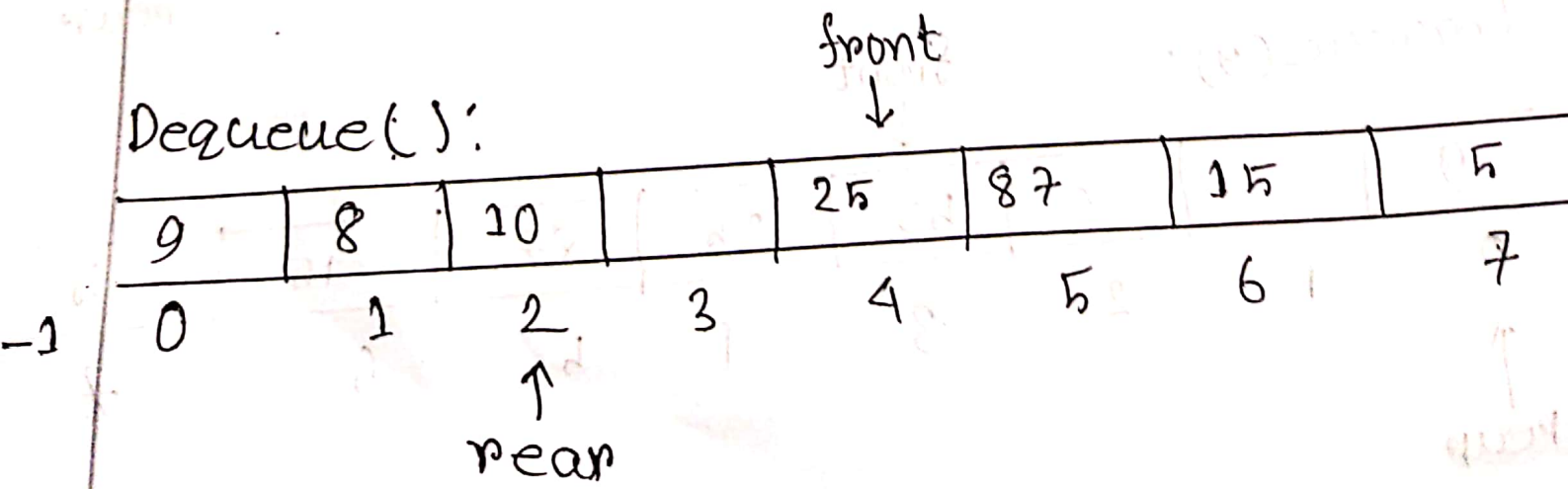



Enqueue (10)




Enqueue(12): Enqueue operation is not possible. Hence rear = front-1, So, the queue is full.

Dequeue():

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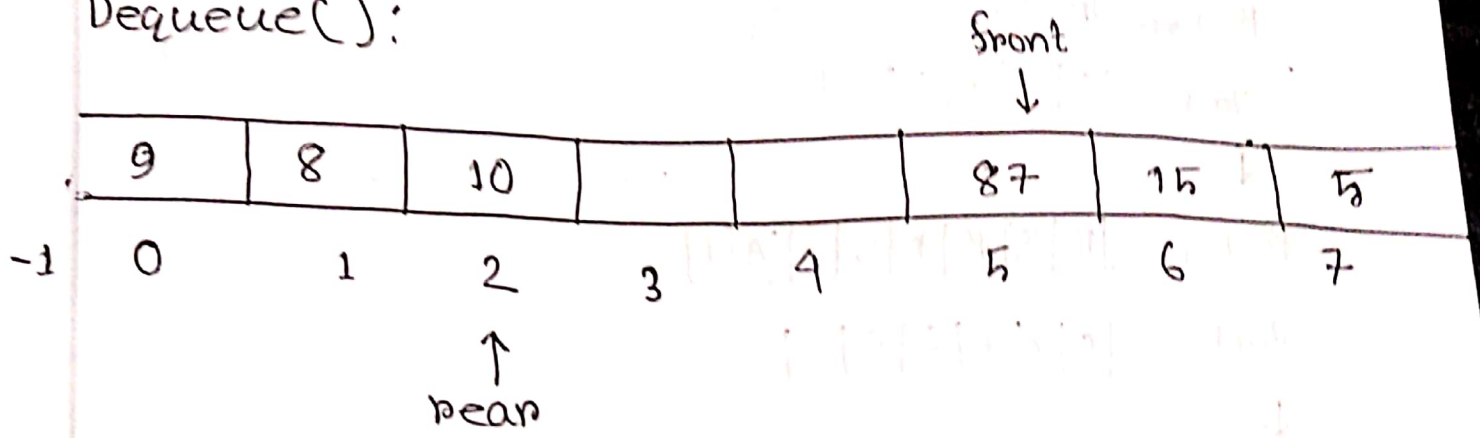
Dequeue():




3. Infix P / { ( Q * R ) - S } * { ( A / F ) + T }

Postfix P

Stack C

↓

Postfix P

Stack C /

↓

Postfix P

Stack C / {

↓

Postfix P Q

Stack C / { (

↓

Postfix P Q R

Stack C / { ( *

Postfix P Q R *

Stack C / {

↓

Postfix P Q R * S

Stack C / { -

↓

Postfix P Q R * S -

Stack C /

↓

Postfix P Q R * S -

Stack C / *

↓

Postfix P Q R * S -

Stack C / * }

Scanned with CamScanner

Postfix | P | Q | R | * | S | - | A |

Stack | C | / | * | ( |

↓

Postfix | P | Q | R | * | S | - | A | F |

Stack | C | / | * | ( | C | / |

↓

Postfix | P | Q | R | * | S | - | A | F | / |

Stack | C | / | * | ( |

↓

Postfix | P | Q | R | * | S | - | A | F | / | T |

Stack | C | / | * | ( | + |

↓

Postfix | P | Q | R | * | S | - | A | F | / | T | + |

Stack | C | / | * |

↓

Postfix | P | Q | R | * | S | - | A | F | / | T | + | * |

Stack | C | / |

Scanned with CamScanner

Postfix | P | Q | R | * | S | - | A | F | / | T | + | * | / |

Stack ☐

4. 10 12 8 - * 18 3 / + 2 /

⇓

10 4 * 18 3 / + 2 /

⇓

40 18 3 / + 2 /

⇓

40 6 + 2 /

⇓

46 2 /

⇓

23

∴ Value = 23 (Answer)

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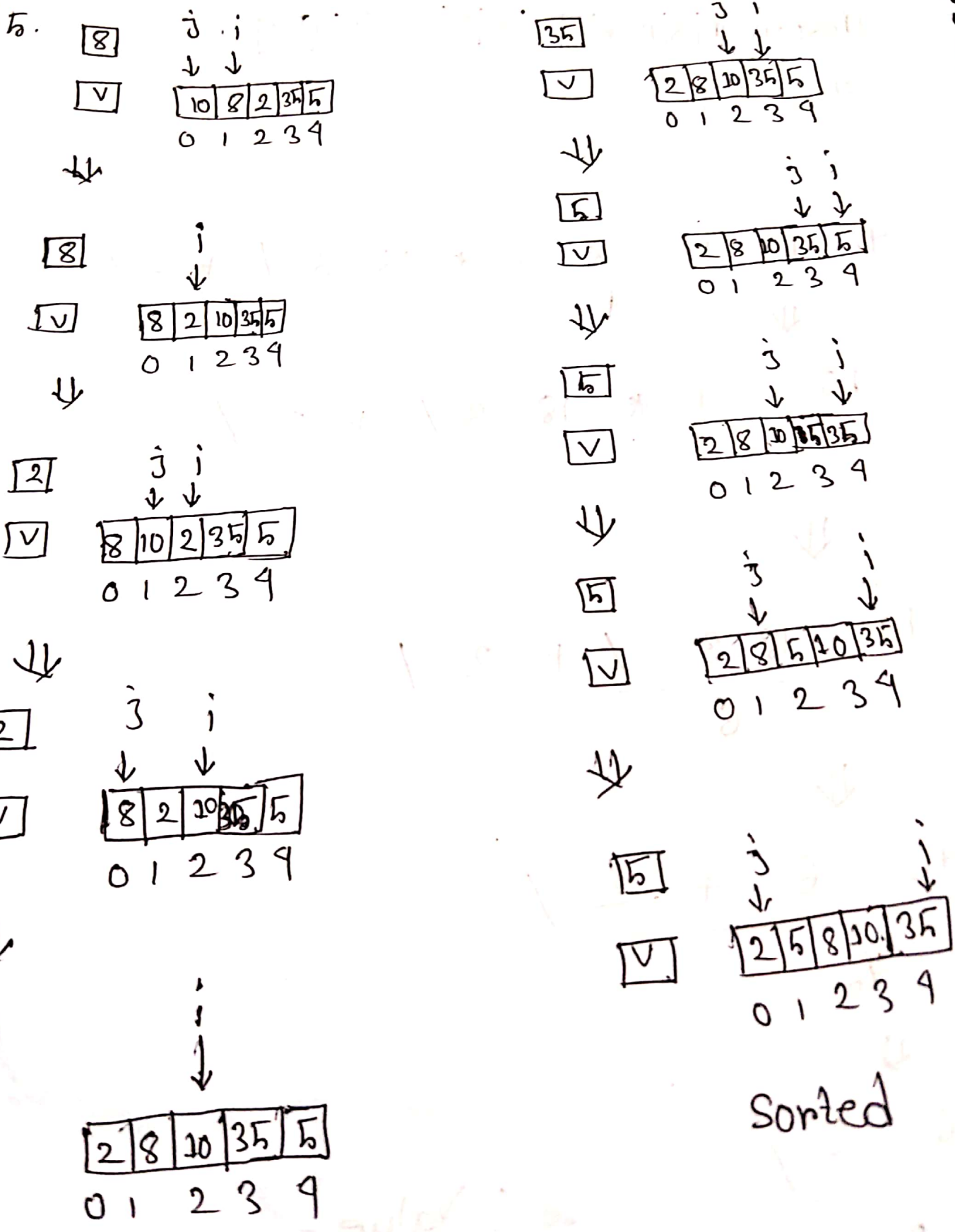
5.




Sorted

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