



HABIB UNIVERSITY

Data Structures & Algorithms

CS/CE 102/171 Spring 2023

Instructor: Maria Samad

Circular Queue Operations

Student 1: _____

**** Assume size of Circular Queue is 6 with initial values as -1**

| OPERATION | OUTPUT | CQ CONTENTS | FRONT INDEX | FRONT ELEMENT | REAR INDEX | REAR ELEMENT |
|----------------|--------|-------------|-------------|---------------|------------|--------------|
| Empty CQ | | | | | | |
| CQ.enqueue(44) | | | | | | |
| CQ.enqueue(29) | | | | | | |
| CQ.enqueue(31) | | | | | | |
| CQ.enqueue(16) | | | | | | |
| CQ.enqueue(98) | | | | | | |
| CQ.dequeue() | | | | | | |
| CQ.dequeue() | | | | | | |
| CQ.enqueue(9) | | | | | | |
| CQ.enqueue(20) | | | | | | |
| CQ.enqueue(15) | | | | | | |
| CQ.enqueue(32) | | | | | | |
| CQ.dequeue() | | | | | | |
| CQ.dequeue() | | | | | | |
| CQ.dequeue() | | | | | | |
| CQ.dequeue() | | | | | | |
| CQ.dequeue() | | | | | | |
| CQ.dequeue() | | | | | | |
| CQ.enqueue(32) | | | | | | |
| CQ.enqueue(64) | | | | | | |