



# RIPHAH

INTERNATIONAL UNIVERSITY

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**Section = BS SE 3-2**

**DSA LAB 09:**

**Task1:**

D: > DSA > DSA LAB > Lab-09 > Task\_1.cpp > ...

```
1 //Task 2
2 #include <iostream>
3 #include <string>
4
5 using namespace std;
6
7 // Class representing a person
8 class Person {
9 private:
10     int id;           // Changed variable name for clarity
11     string name;      // Changed variable name for clarity
12     int age;          // Changed variable name for clarity
13
14 public:
15     // Default constructor to initialize a person
16     Person() : id(0), name(""), age(0) {}
17
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\mwale> cd "d:\DSA\DSA LAB\Lab-09\" ; if ($?) { g++ Task_1.cpp -o Task_1 } ; if ($?) { .\Task_1 }
```

Menu Options:

1. Add Person to Queue
2. Remove Person from Queue
3. Exit

Select an option: 1

Please enter Person ID: 56

Please enter Person Name: waleed

Please enter Person Age: 20

Person has been added to the queue!

## Task 2:

D: > DSA > DSA LAB > Lab-09 > Task\_2.cpp > ...

```
1 // Task 3
2 #include <iostream>
3 using namespace std;
4
5 // Class representing a single node in the queue
6 class Node {
7 public:
8     int value;           // Stores an integer value
9     Node* nextNode;      // Pointer to the next node in the queue
10
11     // Constructor to create a node with a specific value
12     Node(int val) : value(val), nextNode(nullptr) {}
13 };
14
15 // Class implementing a queue using a linked list structure
16 class Queue {
17 private:
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\mwale> cd "d:\DSA\DSA LAB\Lab-09\" ; if ($?) { g++ Task_2.cpp -o Task_2 } ; if ($?) { .\Task_2 }
```

Menu Options:

1. Add value to Queue 1
2. Remove from Queue 1 and add to Queue 2
3. Remove from Queue 2
4. Show Queue 1
5. Show Queue 2
6. Exit

Please enter your choice: 1

Enter a value to add to Queue 1: 5

Enqueued: 5