

Data Structures and Algorithms- Lab Quiz 1

Question 1

2 / 2 pts

Identify the objective of the given code snippet.

```
public void addNode(int data) {  
    Node newNode = new Node(data);  
    if(head == null) {  
        head = newNode;  
        tail = newNode;  
    }  
    else {  
        tail.next = newNode;  
        tail = newNode;  
    }  
}
```

- ☐ traverse the list
- ☐ display the node
- ☒ add a new node to the list
- ☐ delete a new node from the list

Question 2

2 / 2 pts

Identify the objective of the given code snippet.

```
public void deleteNode() {  
    if(head == null)  
    {  
        return;  
    }  
    else {  
        if(head != tail) {  
            head = head.next;  
            head.previous = null;  
        }  
        else {  
            head = tail = null;  
        }  
    }  
}
```

- ☐ insert a node at the end of the list
- ☒ delete a node from the beginning of the list
- ☐ insert a node to the list
- ☐ delete a node from the middle of the linked list

Question 3

2 / 2 pts

Identify the objective of the given code snippet.

```
public class Ap {  
    public static void main(String[] args) {
```

```
int [] arr = new int [] {1, 2, 3, 4, 5};  
for (int i = 0; i < arr.length; i++) {  
    System.out.print(arr[i]);  
}  
}  
}
```

- ☐ delete the element from an array
- ☒ print the elements of an array
- ☐ add a new node to the list
- ☐ traverse a tree

Question 4

2 / 2 pts

Which among the following is an advantage of Linked List over Array.

- ☐ A binary search cannot be performed
- ☐ Nodes do not have their own address.
- ☒ Size of the list doesn't need to be mentioned at the beginning of the program.

Question 5

2 / 2 pts

The number of edges from the node to the deepest leaf is called _____ of the tree.

- ☐ Length
- ☒ Height
- ☐ Width
- ☐ Depth