

## Multiple Choice Questions

In the worst case, the number of comparisons needed to search a singly linked list of length  $n$  for a given element is

- (A)  $\log n$  with base 2
- (B)  $n \cdot n$
- (C)  $n \cdot \log n$  with base 2
- (D)  $n$

RIGHT ANSWER: (D)

which of the following points is/are true about Linked List data structure when it is compared with array

- (A) It is easy to insert and delete elements in Linked List
- (B) Random access is not allowed in a typical implementation of Linked Lists
- (C) The size of array has to be pre-decided, linked lists can change their size any time.
- (D) Arrays have better cache locality that can make them better in terms of performance.
- (E) All of these

RIGHT ANSWER: (E)

What does the following function do for a given Linked List with first node as head?

```
abc(head)
    if head == NULL:
        return
    abc(head.next);
    print(head.data)
```

- (A) It will print all element of list
- (B) It will print all element of list in reverse order
- (C) It will print alternative element of the list
- (D) It will print nothing

RIGHT ANSWER: (B)

Which of these is not an application of linked list?

- (A) Random Access of elements
- (B) For separate chaining in hash-tables
- (C) To implement non-binary trees
- (D) To implement file systems

RIGHT ANSWER: (A)

What is output of the following code

```
p = 'Jaipur'
q = input('Enter value ')
#say Jaipur
print(p is q, end = ' ')
print(p == q, end = ' ')
print(id(p) == id(q))
```

- (A) False True False
- (B) False True True
- (C) True False True
- (D) True False False

RIGHT ANSWER: (A)