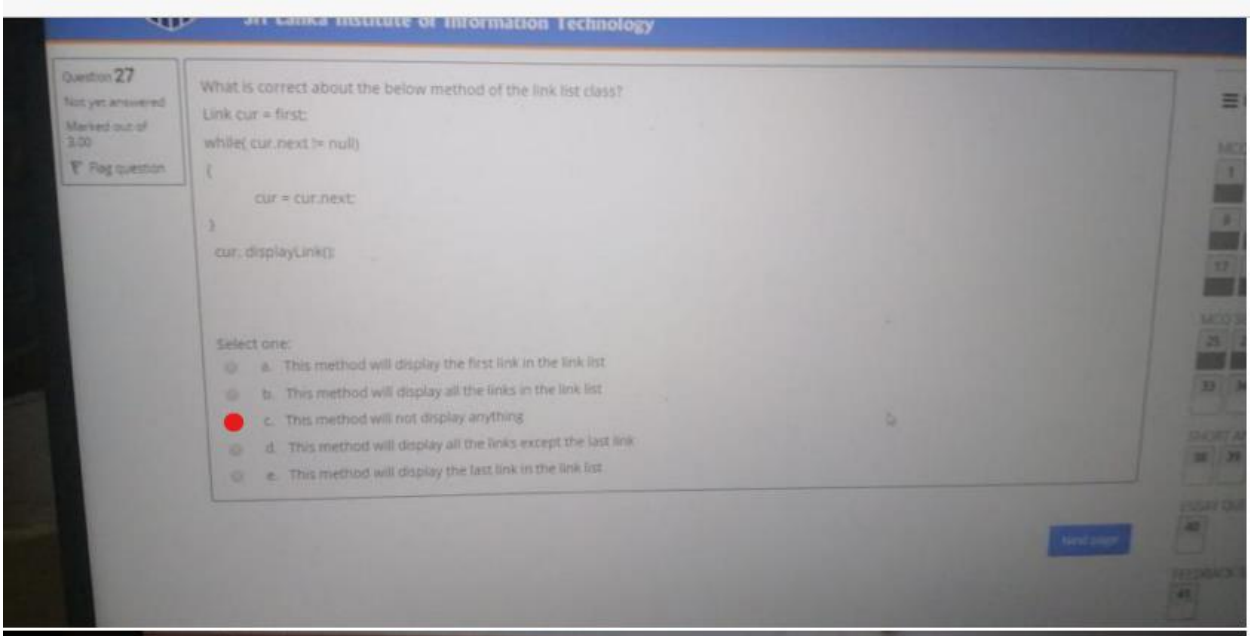
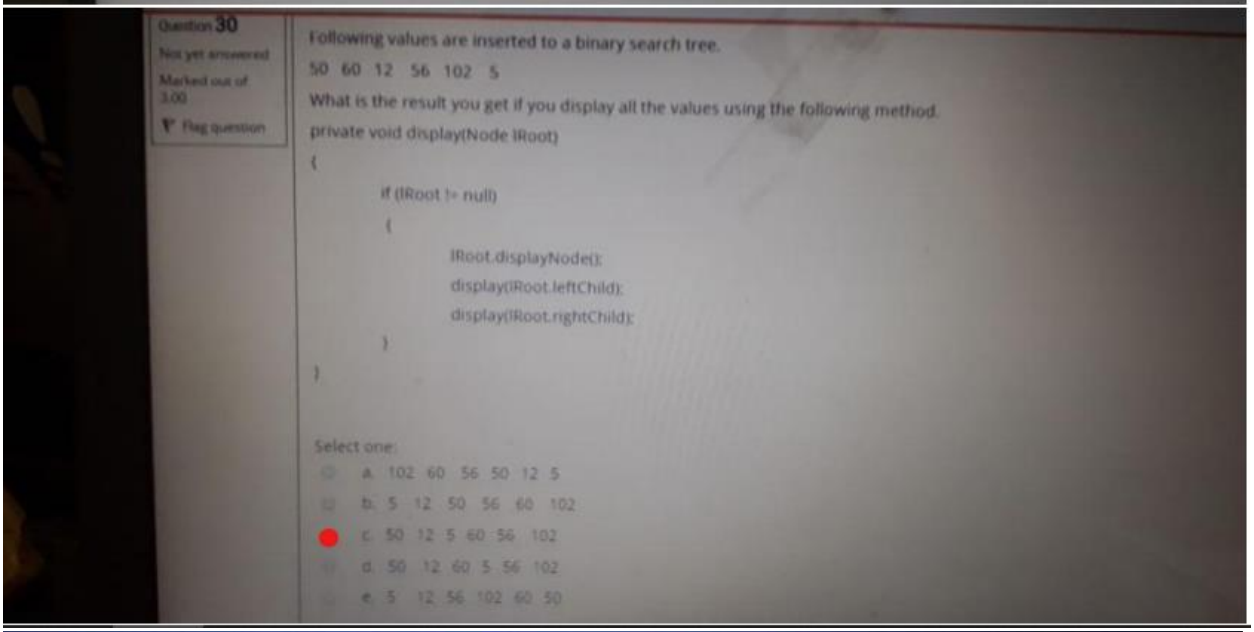
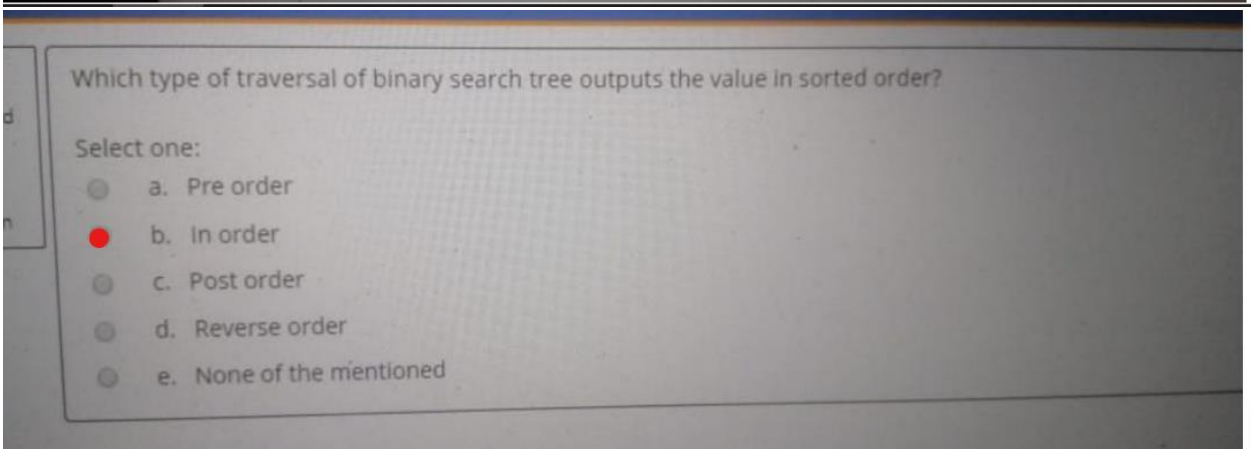

Sri Lanka Institute of Information Technology
Question 27
Not yet answered
Marked out of 3.00
Flag question
What is correct about the below method of the link list class?
Link cur = first;
while( cur.next != null)
{
cur = cur.next;
}
cur. displayLink();
Select one:
a. This method will display the first link in the link list
b. This method will display all the links in the link list
c. This method will not display anything
d. This method will display all the links except the last link
e. This method will display the last link in the link list


Question 30
Not yet answered
Marked out of 3.00
Flag question
Following values are inserted to a binary search tree.
50 60 12 56 102 5
What is the result you get if you display all the values using the following method.
private void display(Node iRoot)
{
if (iRoot != null)
{
iRoot.displayNode();
display(iRoot.leftChild);
display(iRoot.rightChild);
}
}
Select one:
a. 102 60 56 50 12 5
b. 5 12 50 56 60 102
c. 50 12 5 60 56 102
d. 50 12 60 5 56 102
e. 5 12 56 102 60 50


Which type of traversal of binary search tree outputs the value in sorted order?
Select one:
a. Pre order
b. In order
c. Post order
d. Reverse order
e. None of the mentioned

Select one:

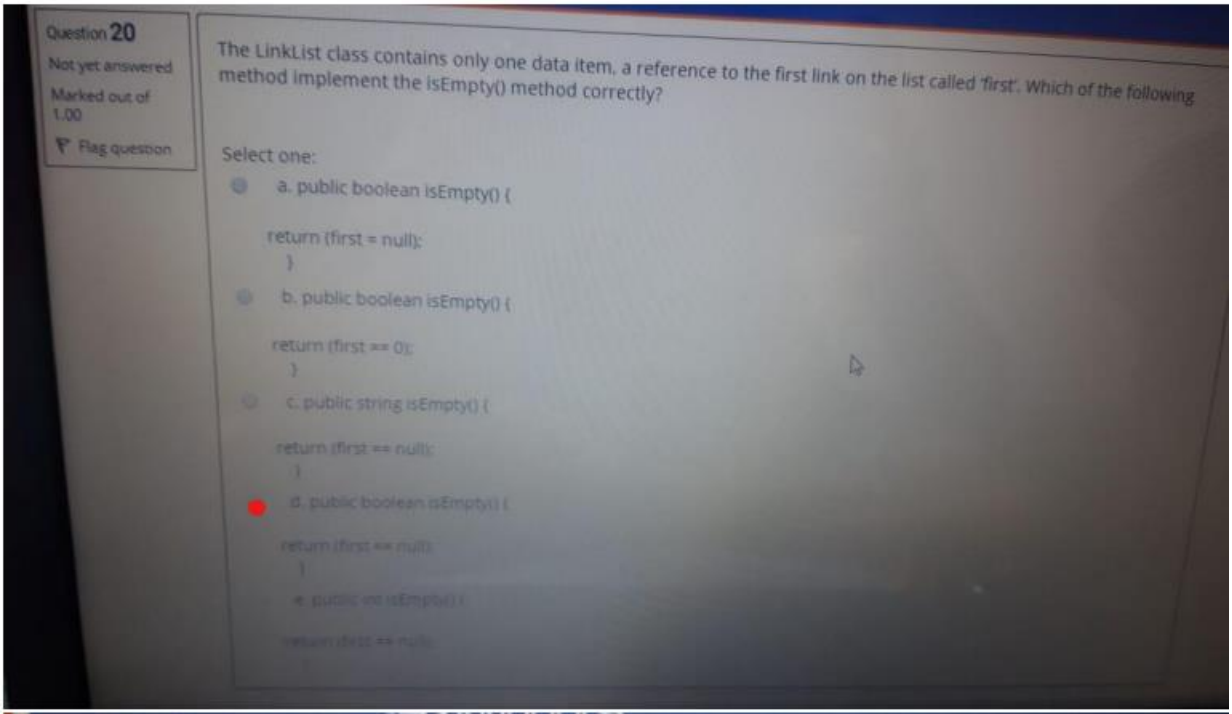
a.
```
public Link deleteFirst() {
        Link temp = first;
        first = first.next;
        return first;
    }
}
```

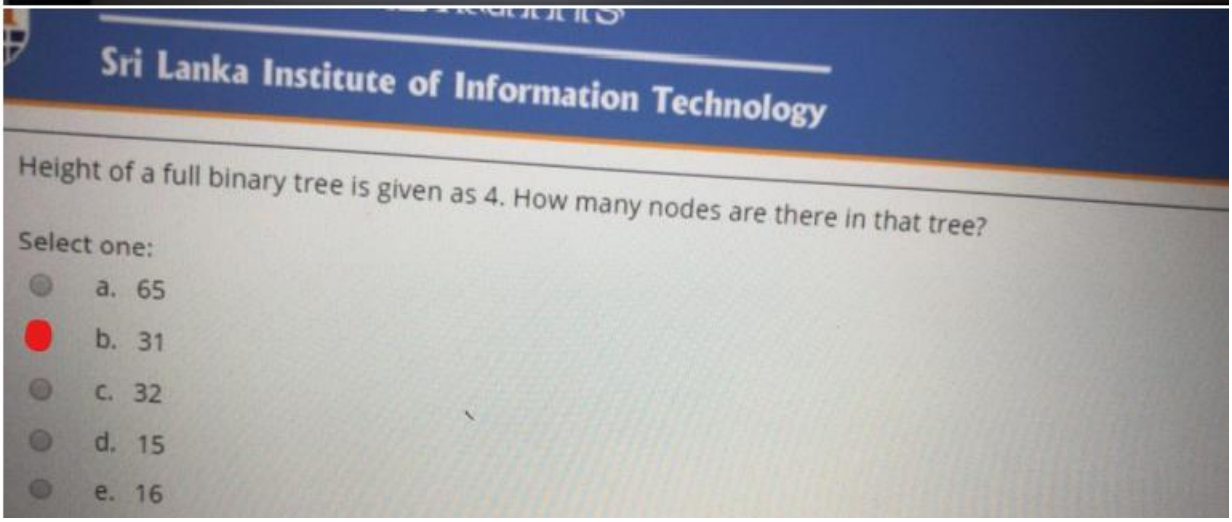
b.
```
public Link deleteFirst() {
        Link temp = first.next;
        first = first.next;
        return temp;
    }
}
```

c.
```
public Link deleteFirst() {
        Link temp = first;
        first = first.next;
    }
}
```

d.
```
public Link deleteFirst() {
        Link temp.next = first;
        first = first.next;
        return temp;
    }
}
```

e.
```
public Link deleteFirst() {
        Link temp = first;
        first = first.next;
        return temp;
    }
}
```


Question 20
Not yet answered
Marked out of 1.00
Flag question
The LinkList class contains only one data item, a reference to the first link on the list called 'first'. Which of the following method implement the isEmpty() method correctly?
Select one:
a. public boolean isEmpty() {
return (first = null);
}
b. public boolean isEmpty() {
return (first == 0);
}
c. public string isEmpty() {
return (first == null);
}
d. public boolean isEmpty() {
return (first == null)
}

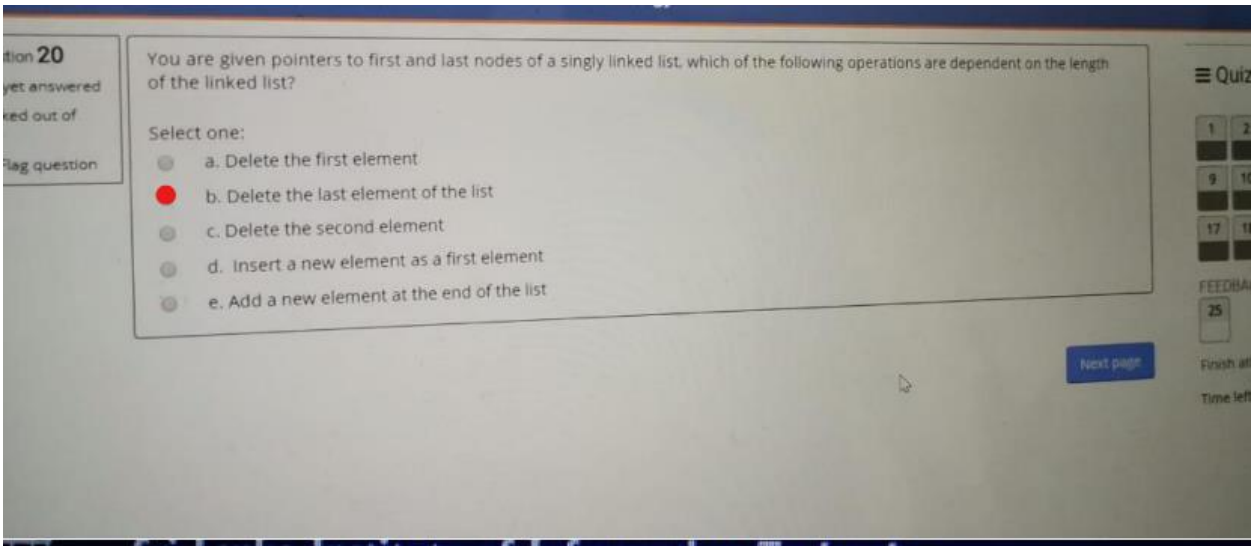

Sri Lanka Institute of Information Technology
Height of a full binary tree is given as 4. How many nodes are there in that tree?
Select one:
a. 65
b. 31
c. 32
d. 15
e. 16

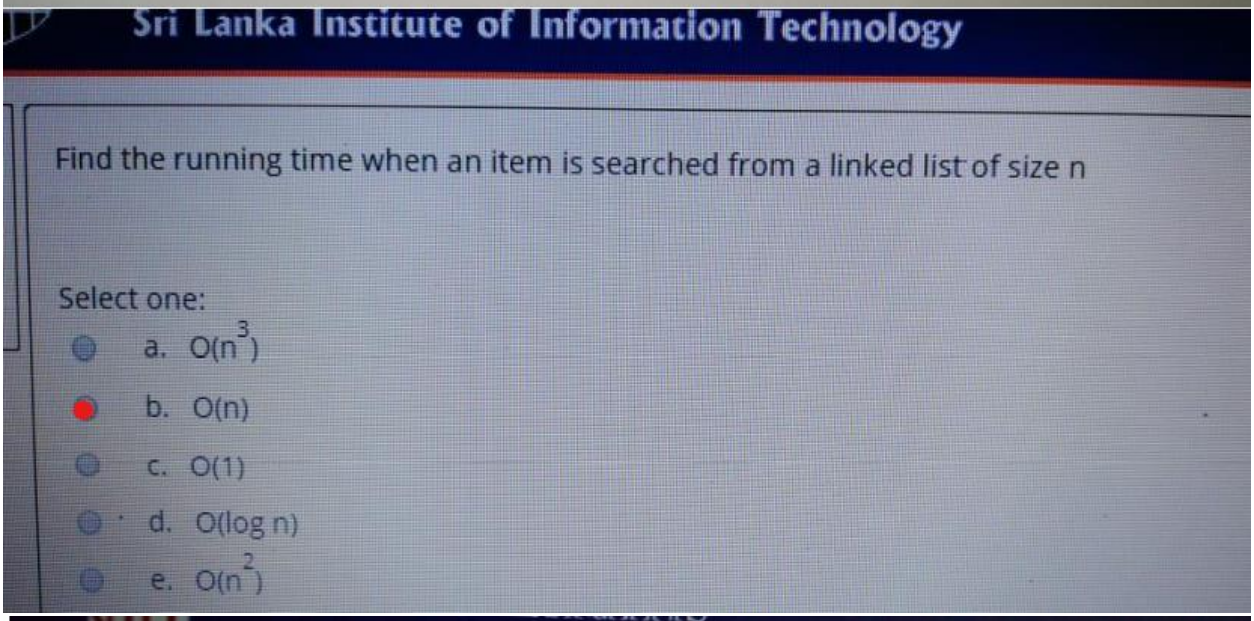
Consider the below method of a linear queue data structure. What can be the method "XX"?

```
public int XX() {
    if (nItems == 0) {
        System.out.println("Queue is empty");
        return -99;
    }
    else {
        return queArray[front];
    }
}
```

Select one:

- a. remove()
- b. peekFront()
- c. pop()
- d. insert()
- e. delete()


tion 20
yet answered
ked out of
Flag question
You are given pointers to first and last nodes of a singly linked list, which of the following operations are dependent on the length of the linked list?
Select one:
a. Delete the first element
b. Delete the last element of the list
c. Delete the second element
d. Insert a new element as a first element
e. Add a new element at the end of the list
Next page
Quiz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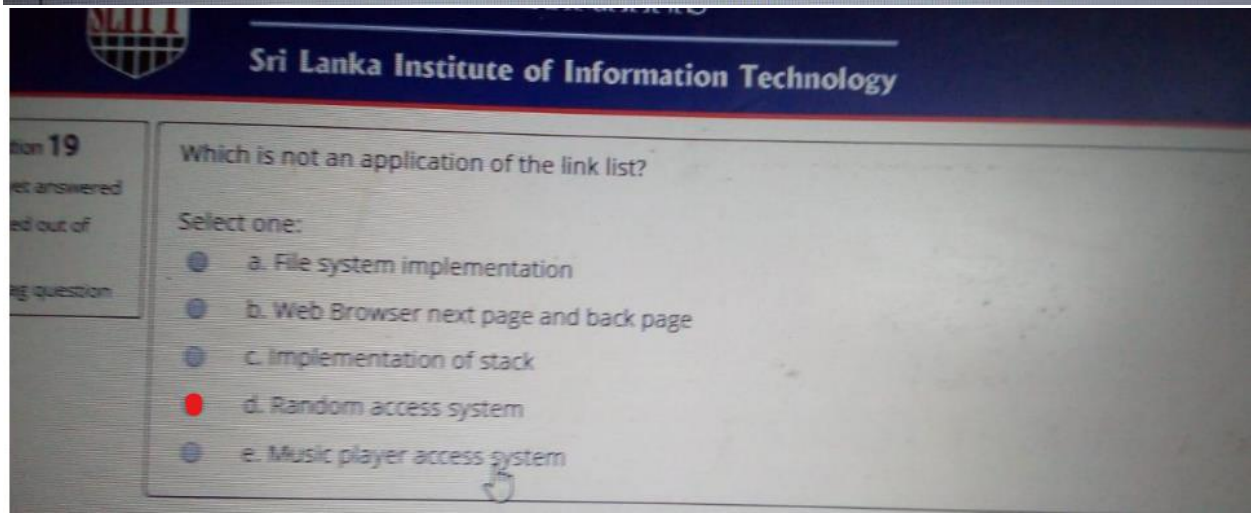
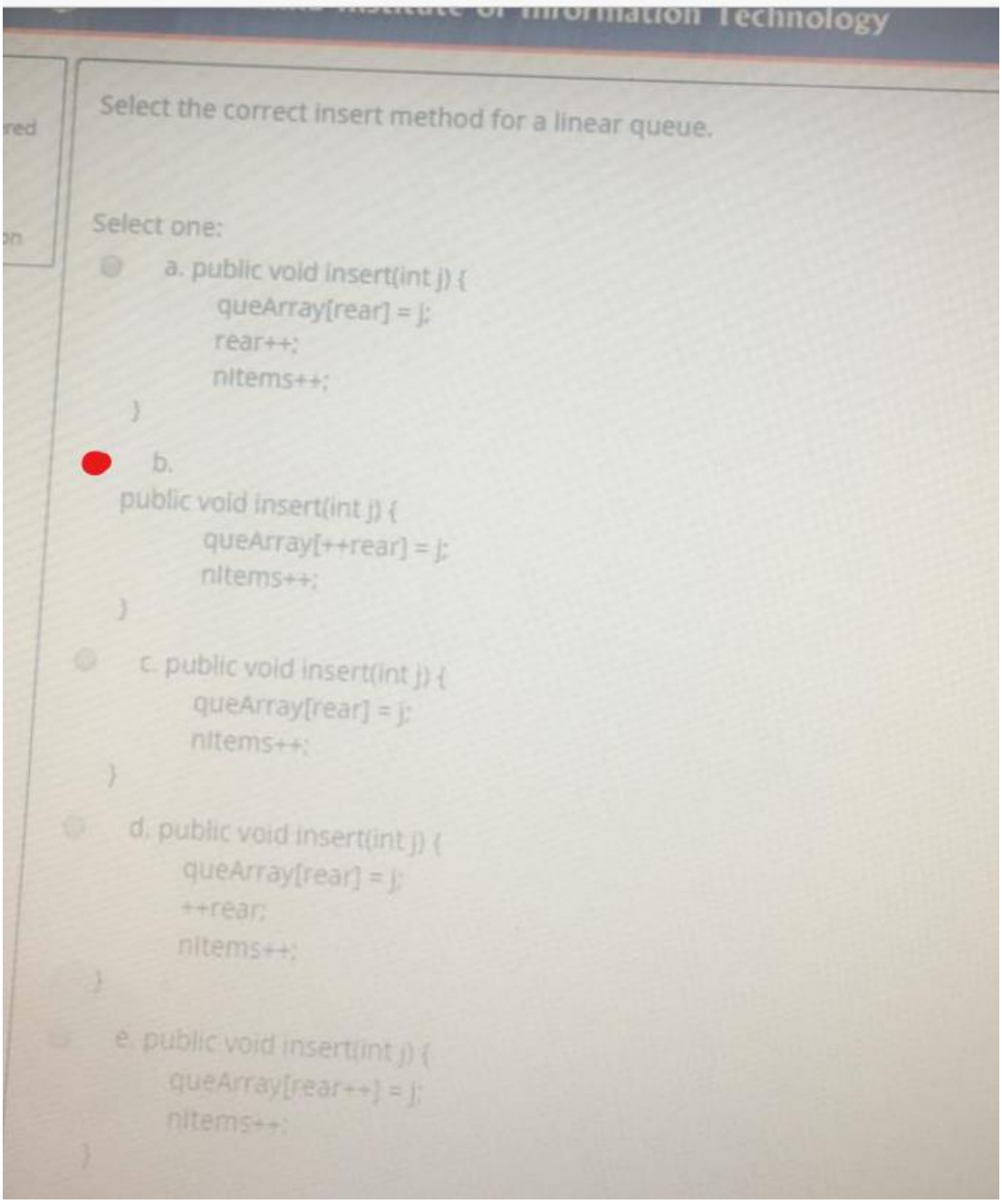
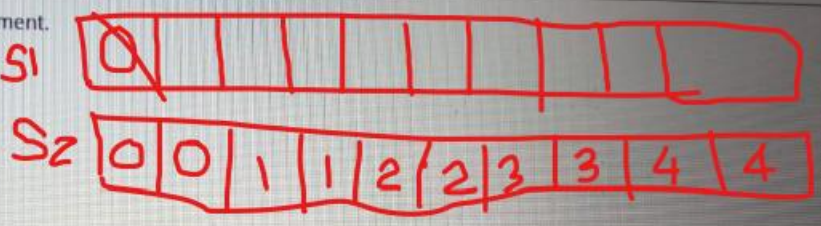
Find the running time when an item is searched from a linked list of size n
Select one:
a. O(n^3)
b. O(n)
c. O(1)
d. O(log n)
e. O(n^2)


Sri Lanka Institute of Information Technology
tion 19
yet answered
ked out of
Flag question
Which is not an application of the link list?
Select one:
a. File system implementation
b. Web Browser next page and back page
c. Implementation of stack
d. Random access system
e. Music player access system


Institute of Information Technology
red
on
Select the correct insert method for a linear queue.
Select one:
a. public void insert(int j) {
queArray[rear] = j;
rear++;
nItems++;
}
b.
public void insert(int j) {
queArray[++rear] = j;
nItems++;
}
c. public void insert(int j) {
queArray[rear] = j;
nItems++;
}
d. public void insert(int j) {
queArray[rear] = j;
++rear;
nItems++;
}
e. public void insert(int j) {
queArray[rear++] = j;
nItems++;
}

Consider the following code segment.

```
StackX s1 = new StackX(10);
StackX s2 = new StackX(10);
for(int i=0; i<5; i++) {
        s1.push(i);
        s2.push(s1.peek());
        s2.push(s1.pop());
}
```




Which of the following statement is correct after performing the above code segment?

Select one:

- a. s1 is empty and s2 is empty
- b. s1 is empty and s2 is full
- c. s1 and s2 stacks contain the same numbers
- d. s2 is empty and s1 is full
- e. s1 is full and s2 is full

What is the correct condition to check whether a tree is empty?

Select one:

- a. root == first
- b. root == null
- c. cur.leftChild == null
- d. cur.leftChild == null and cur.rightChild == null
- e. cur.rightChild == null

# Online Exams

**Sri Lanka Institute of Information Technology**

Question **18**

Not yet answered

Marked out of 1.00

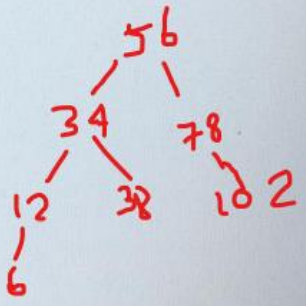
Flag question

Find the leaf nodes of the binary search tree after inserting the below numbers

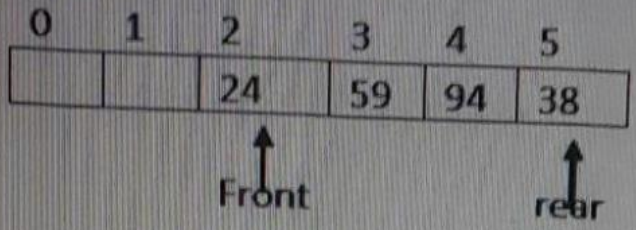
56 78 34 12 102 38 6

Select one:

- a. 12 102 38 6
- b. 6 38 102
- c. 56 12
- d. 56 78 34 12
- e. 6 38 78 102



Consider the following circular queue.



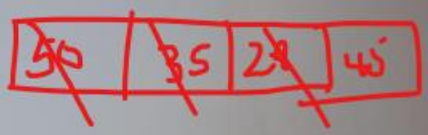

Select the correct statement about the above queue.

Select one:

- a. The next value of the rear will be 0
- b. The next value of the rear will be 1
- c. The next value of the rear will be 6
- d. The next value of the rear will be invalid
- e. The next value of the rear will be 5

Consider the following operations performed on an empty linear queue of size 4

insert(50);
insert(35);
remove( );
insert(28);
insert(45);
insert(60);
remove( );
remove( );
peekFront( );




What is the correct order of values removed from the queue?

Select one:

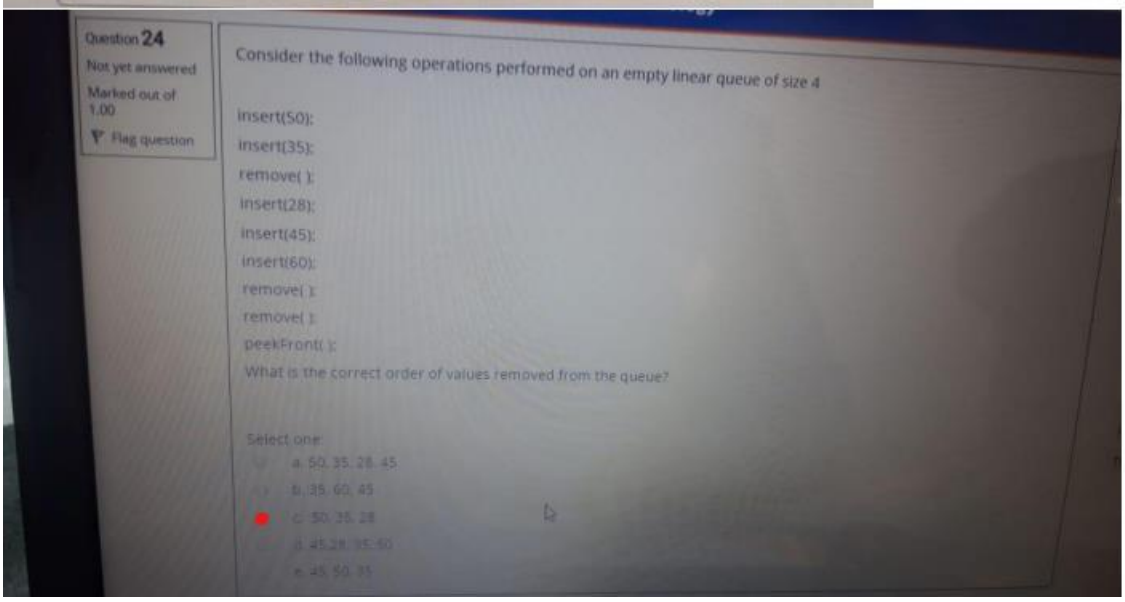
a. 50, 35, 28, 45
b. 35, 60, 45
c. 50, 35, 28
d. 45,28, 35, 50
e. 45, 50, 35

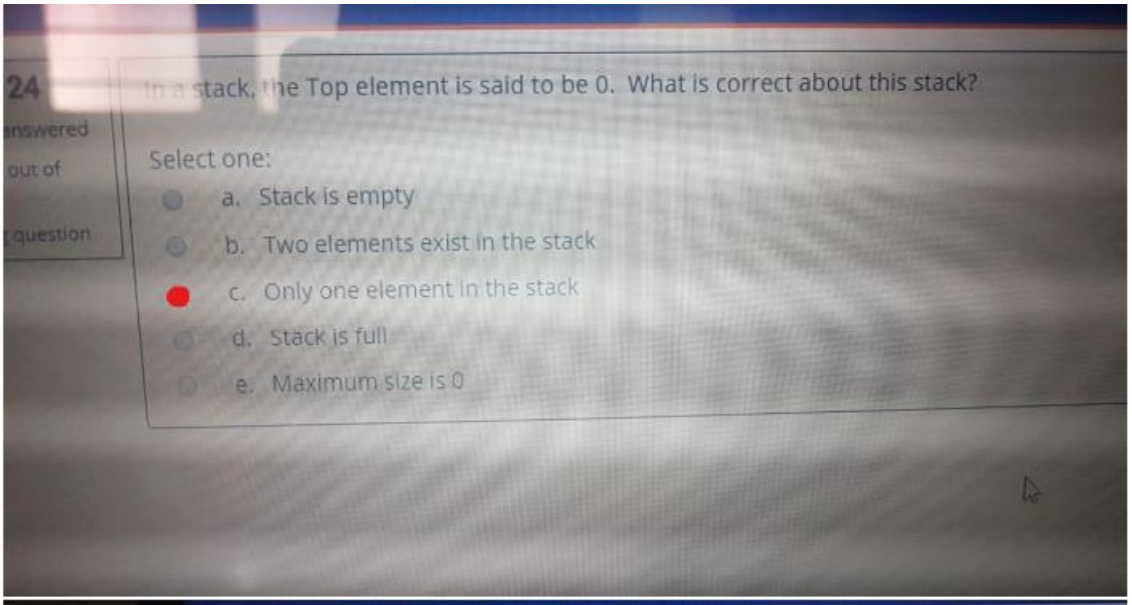
What is correct about the below method of the link list class?

```
Link cur = first;
while( cur.next != null)
{
        cur = cur.next;
}
 cur. displayLink();
```

Select one:

- a. This method will display all the links in the link list
- b. This method will display the first link in the link list
- c. This method will display the last link in the link list
- d. This method will display all the links except the last link
- e. This method will not display anything




24
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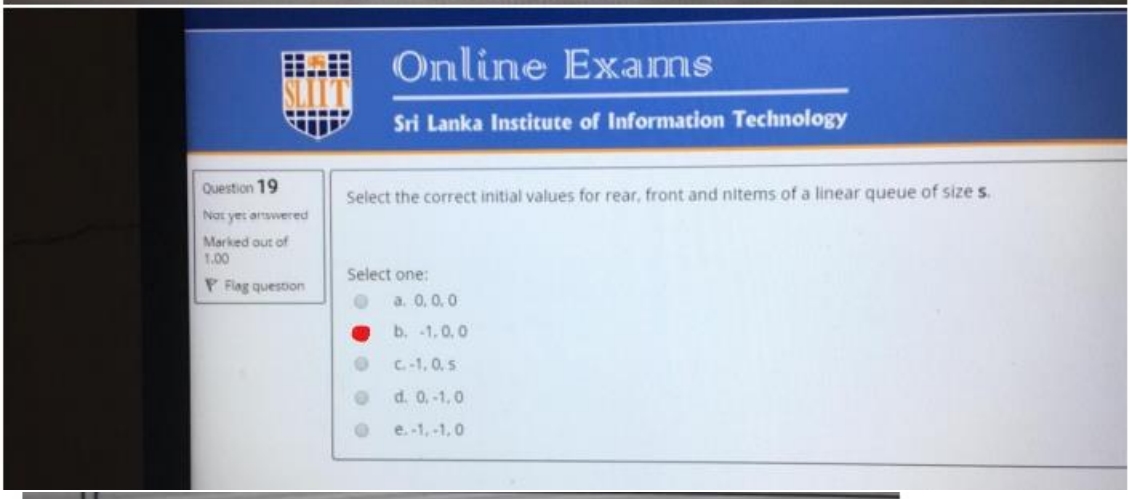
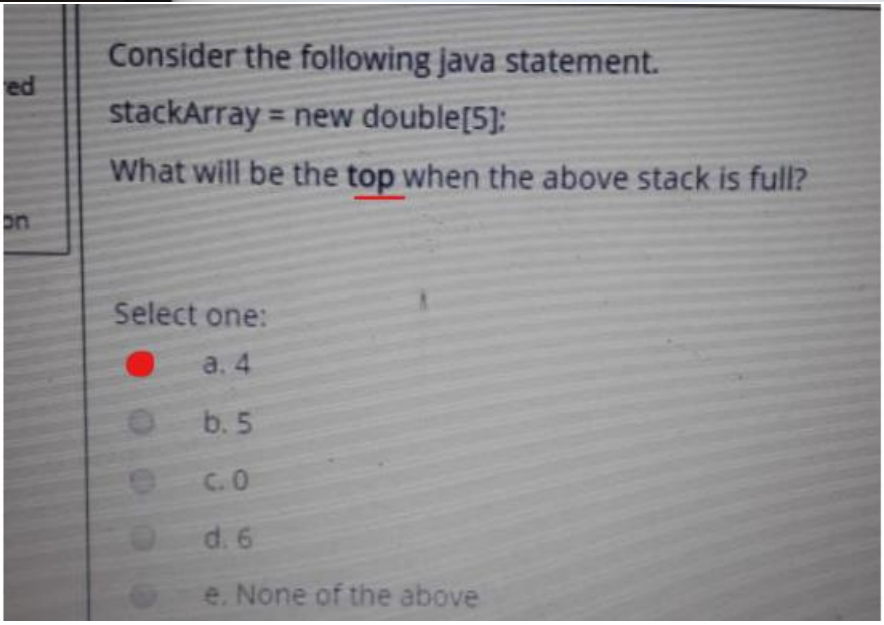
out of
question
In a stack, the Top element is said to be 0. What is correct about this stack?
Select one:
a. Stack is empty
b. Two elements exist in the stack
c. Only one element in the stack
d. Stack is full
e. Maximum size is 0


Online Exams
Sri Lanka Institute of Information Technology
Question 19
Not yet answered
Marked out of 1.00
Flag question
Select the correct initial values for rear, front and nitems of a linear queue of size s.
Select one:
a. 0, 0, 0
b. -1, 0, 0
c. -1, 0, s
d. 0, -1, 0
e. -1, -1, 0

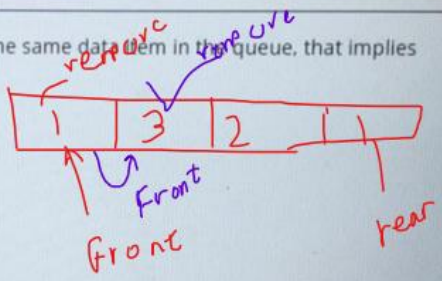

ed
on
Consider the following java statement.
stackArray = new double[5];
What will be the top when the above stack is full?
Select one:
a. 4
b. 5
c. 0
d. 6
e. None of the above

Question 21
Not yet answered
Marked out of 1.00
Flag question

If a rear and front of a linear queue are pointed to the same data item in the queue, that implies

Select one:

- a. This cannot be happened
- b. Queue has only one data item
- c. Queue is empty
- d. Information is not enough to say anything
- e. Queue is full

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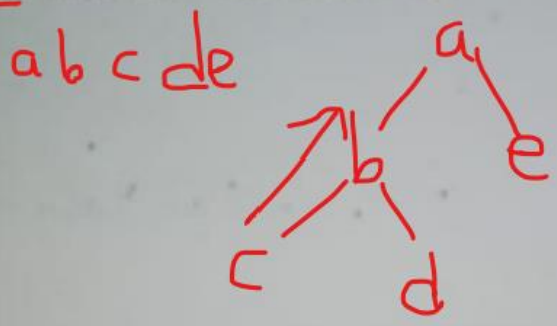
The Pre-order traversal of a binary tree is a b c d e then possible in-order traversal will be

Select one:

- a. c b d a e
- b. c d b e a
- c. c b d e a
- d. c d b a e
- e. a b c e d




Online Exams

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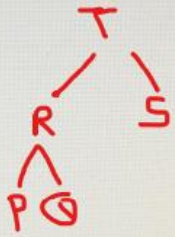
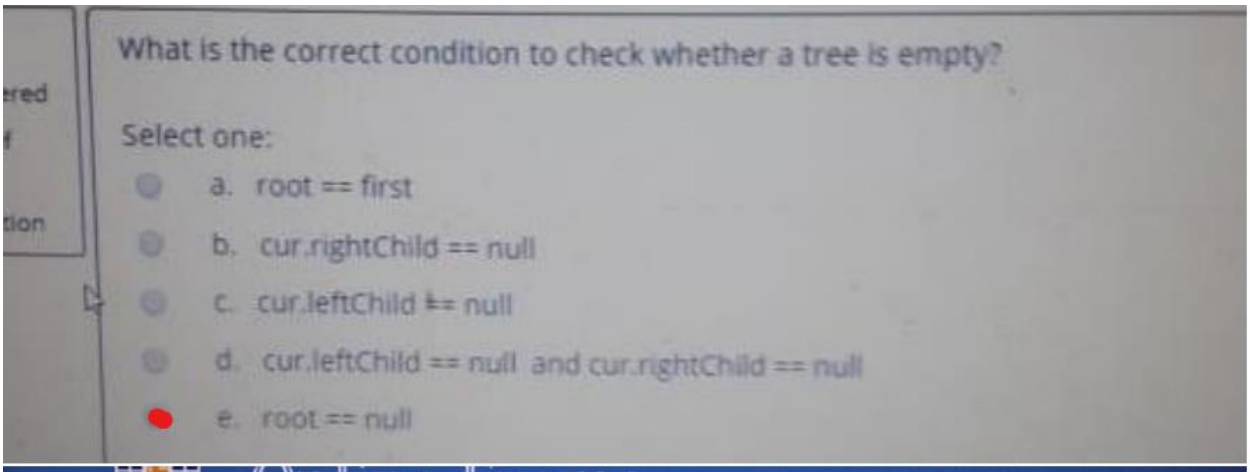
0
Flag question

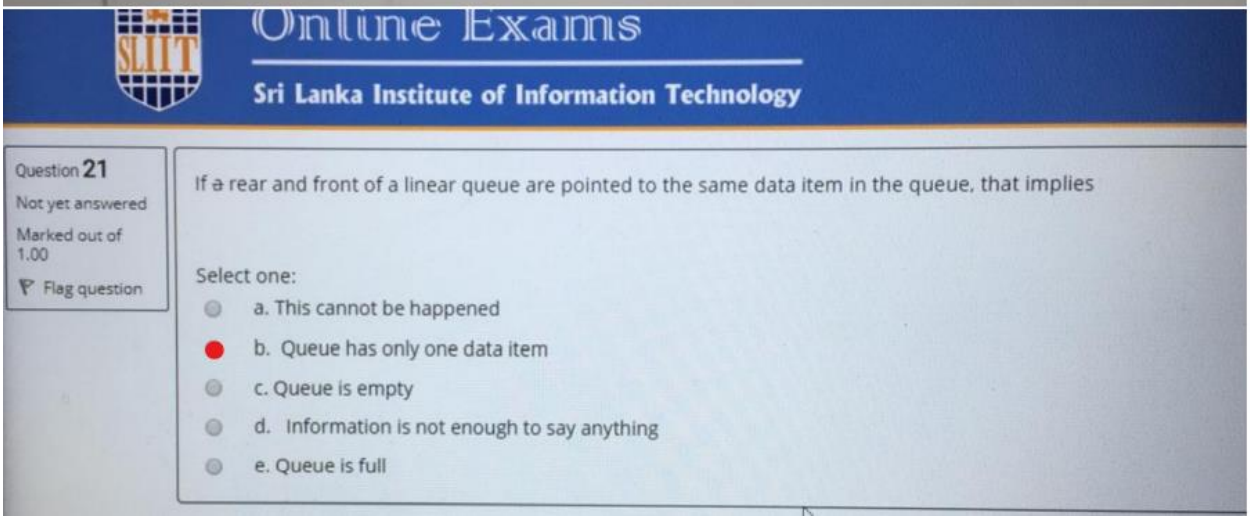
The Post-order traversal of a binary tree is P Q R S T. Then possible Pre-order traversal will be

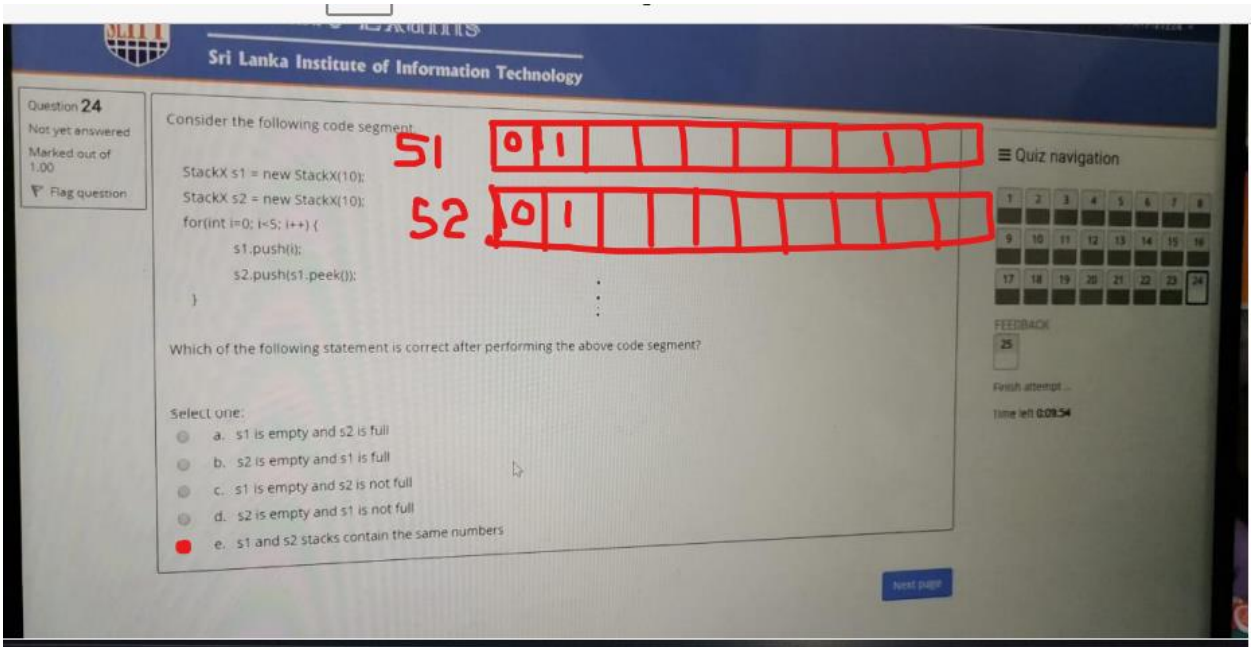
Select one:

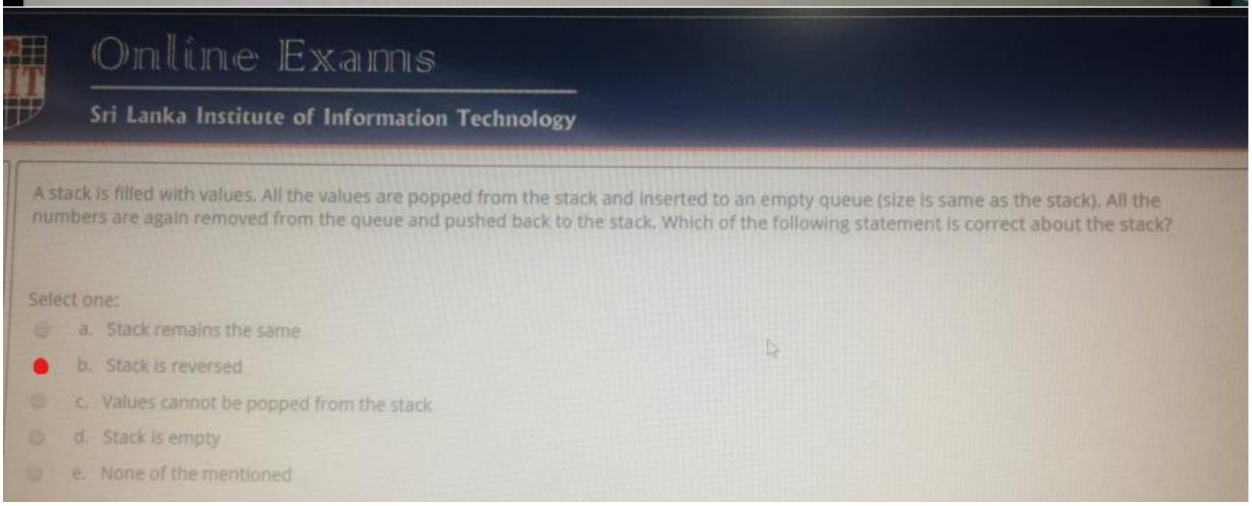
- a. T R Q P S
- b. T R P S Q
- c. T R Q S P
- d. P Q R T S
- e. T R P Q S




What is the correct condition to check whether a tree is empty?
Select one:
a. root == first
b. cur.rightChild == null
c. cur.leftChild != null
d. cur.leftChild == null and cur.rightChild == null
e. root == null


Online Exams
Sri Lanka Institute of Information Technology
Question 21
Not yet answered
Marked out of 1.00
Flag question
If a rear and front of a linear queue are pointed to the same data item in the queue, that implies
Select one:
a. This cannot be happened
b. Queue has only one data item
c. Queue is empty
d. Information is not enough to say anything
e. Queue is full


Sri Lanka Institute of Information Technology
Question 24
Not yet answered
Marked out of 1.00
Flag question
Consider the following code segment.
StackX s1 = new StackX(10);
StackX s2 = new StackX(10);
for(int i=0; i<5; i++) {
s1.push(i);
s2.push(s1.peek());
}
S1
S2
Which of the following statement is correct after performing the above code segment?
Select one:
a. s1 is empty and s2 is full
b. s2 is empty and s1 is full
c. s1 is empty and s2 is not full
d. s2 is empty and s1 is not full
e. s1 and s2 stacks contain the same numbers
Quiz navigation
FEEDBACK
Finish attempt ...
Time left 0:09:54


Online Exams
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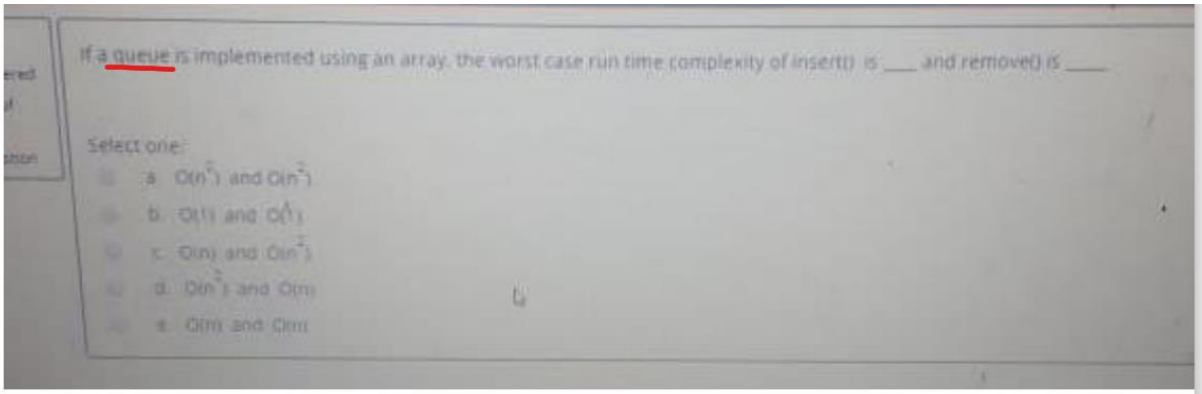
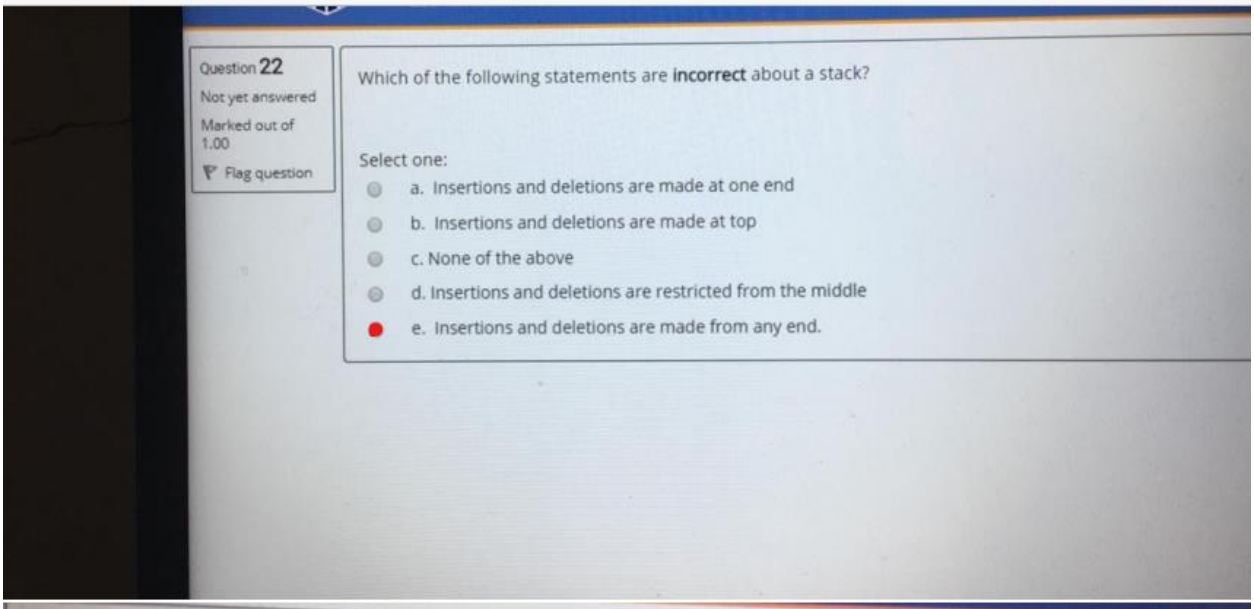
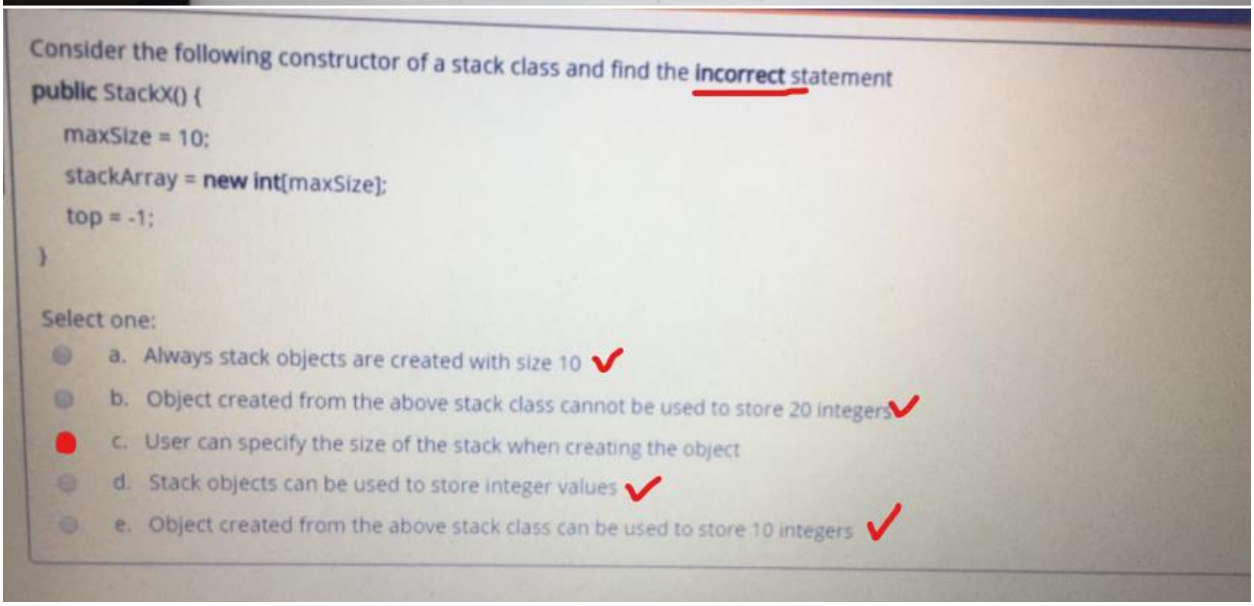
A stack is filled with values. All the values are popped from the stack and inserted to an empty queue (size is same as the stack). All the numbers are again removed from the queue and pushed back to the stack. Which of the following statement is correct about the stack?
Select one:
a. Stack remains the same
b. Stack is reversed
c. Values cannot be popped from the stack
d. Stack is empty
e. None of the mentioned

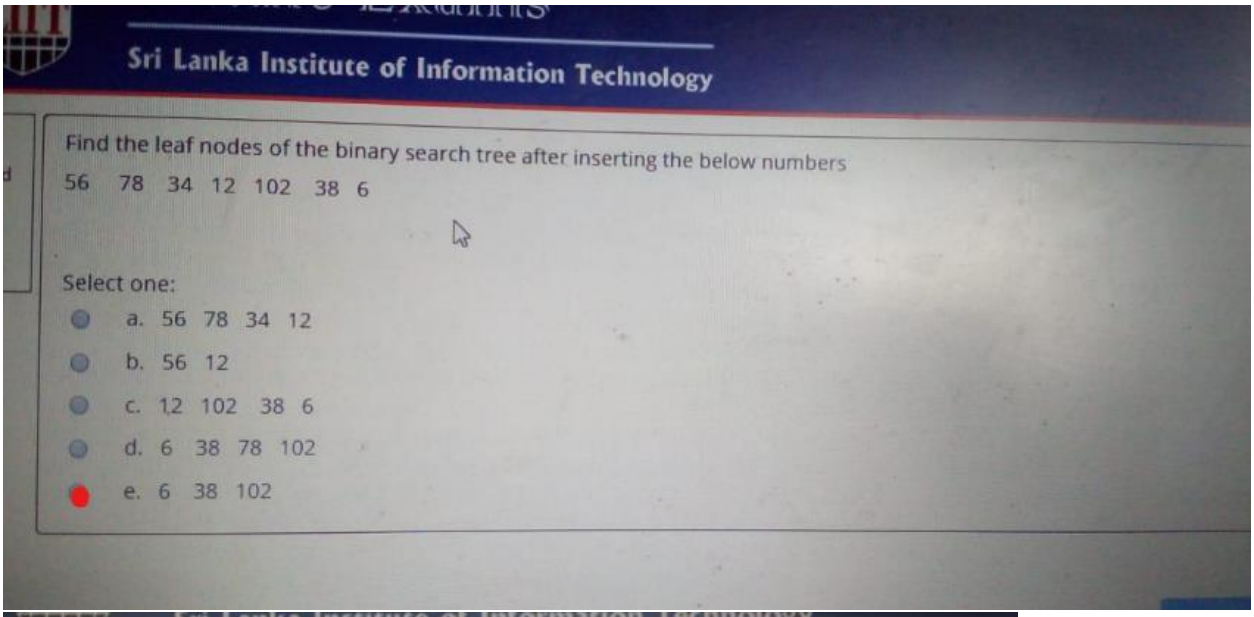


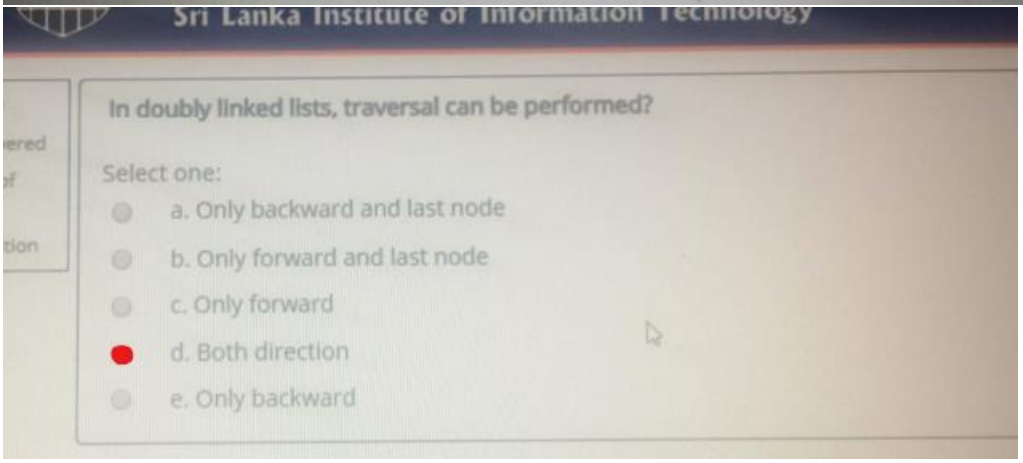

Insert = O(1)

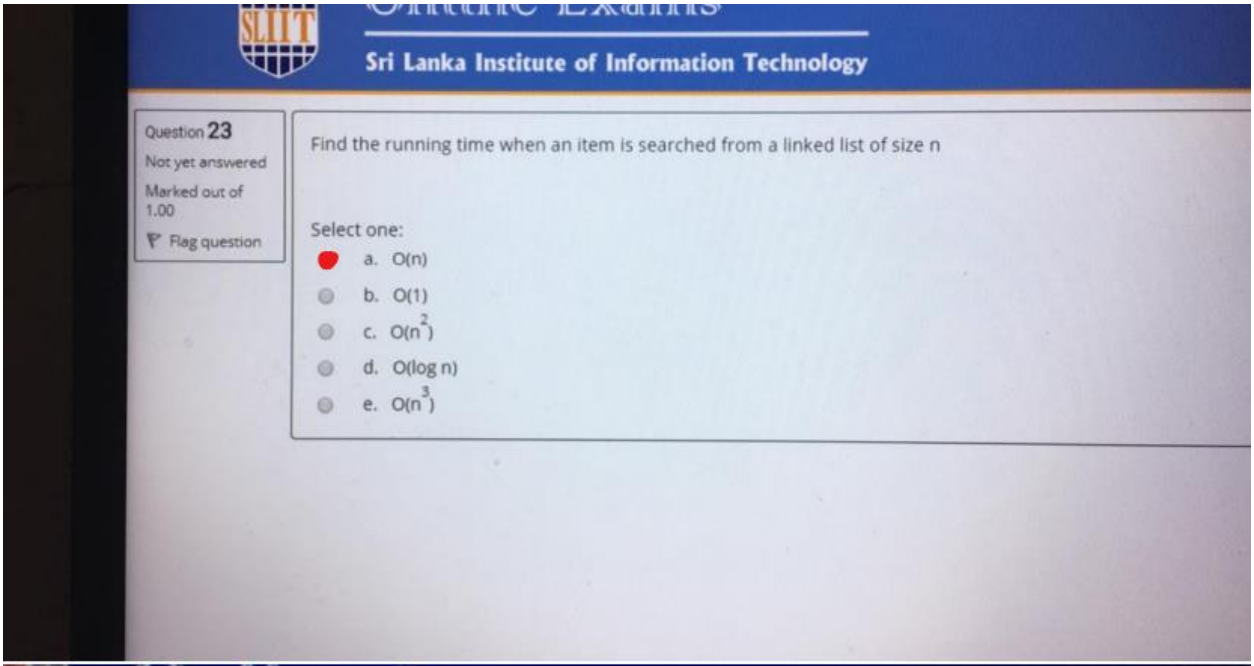
remove = O(1)


Question 22
Not yet answered
Marked out of 1.00
Flag question
Which of the following statements are incorrect about a stack?
Select one:
a. Insertions and deletions are made at one end
b. Insertions and deletions are made at top
c. None of the above
d. Insertions and deletions are restricted from the middle
e. Insertions and deletions are made from any end.


Consider the following constructor of a stack class and find the incorrect statement
public StackX() {
maxSize = 10;
stackArray = new int[maxSize];
top = -1;
}
Select one:
a. Always stack objects are created with size 10
b. Object created from the above stack class cannot be used to store 20 integers
c. User can specify the size of the stack when creating the object
d. Stack objects can be used to store integer values
e. Object created from the above stack class can be used to store 10 integers


Sri Lanka Institute of Information Technology
Find the leaf nodes of the binary search tree after inserting the below numbers
56 78 34 12 102 38 6
Select one:
a. 56 78 34 12
b. 56 12
c. 12 102 38 6
d. 6 38 78 102
e. 6 38 102


Sri Lanka Institute of Information Technology
In doubly linked lists, traversal can be performed?
Select one:
a. Only backward and last node
b. Only forward and last node
c. Only forward
d. Both direction
e. Only backward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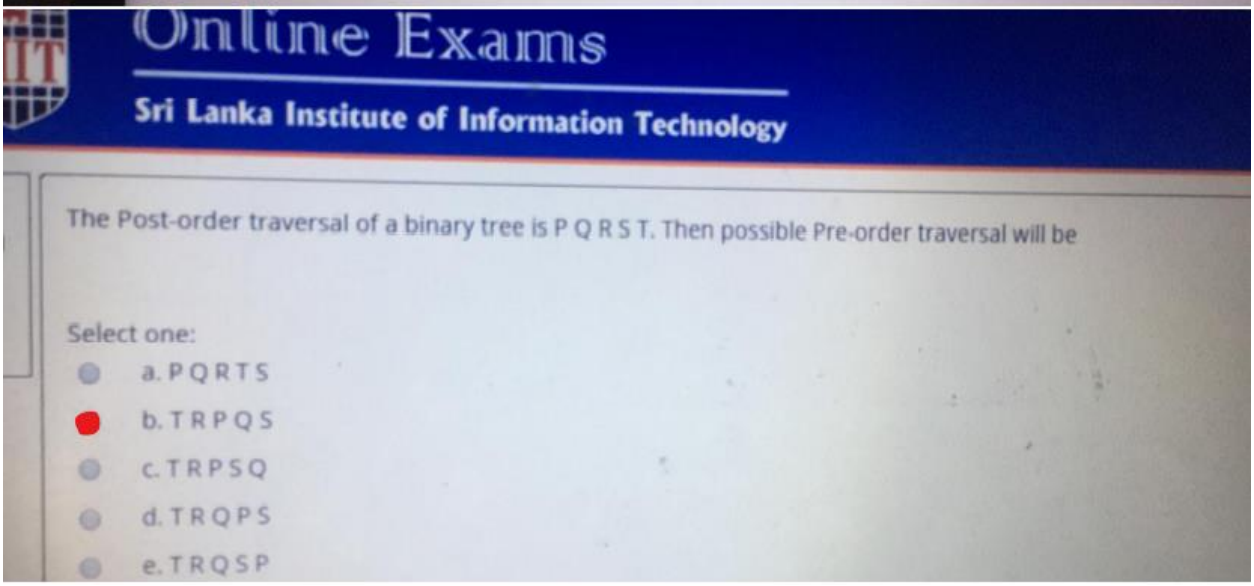
Question 23
Not yet answered
Marked out of 1.00
Flag question
Find the running time when an item is searched from a linked list of size n
Select one:
a. O(n)
b. O(1)
c. O(n^2)
d. O(log n)
e. O(n^3)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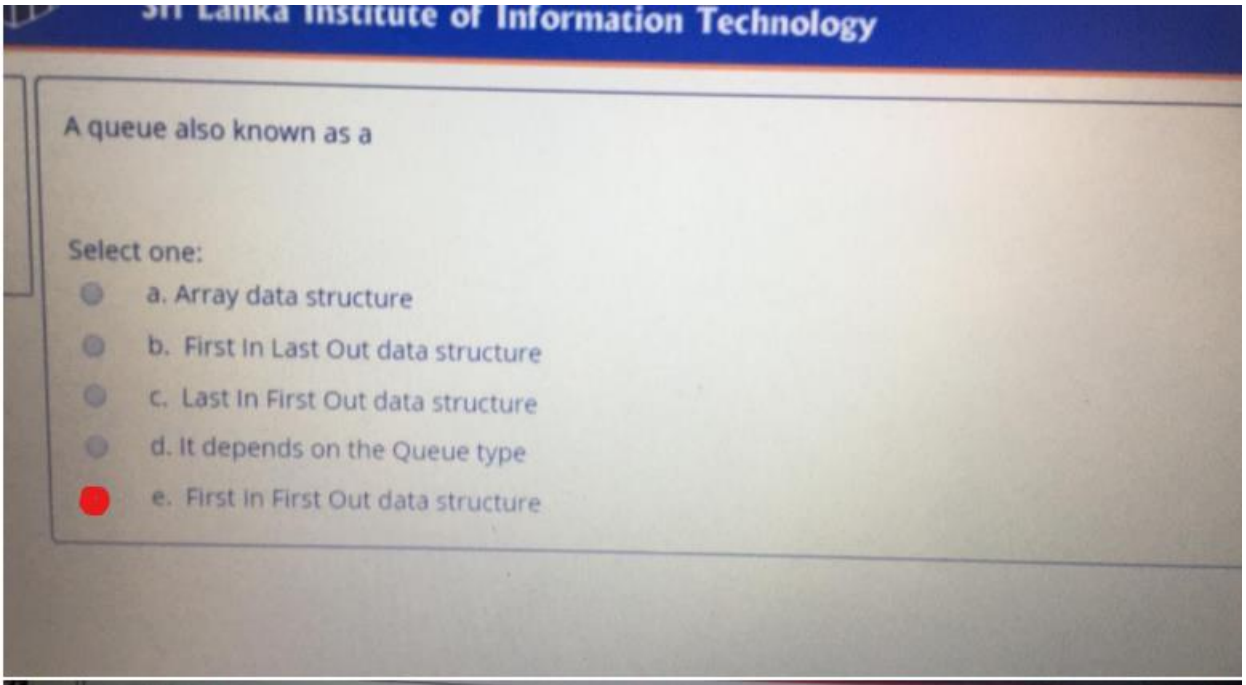
The Post-order traversal of a binary tree is P Q R S T. Then possible Pre-order traversal will be
Select one:
a. P Q R T S
b. T R P Q S
c. T R P S Q
d. T R Q P S
e. T R Q S P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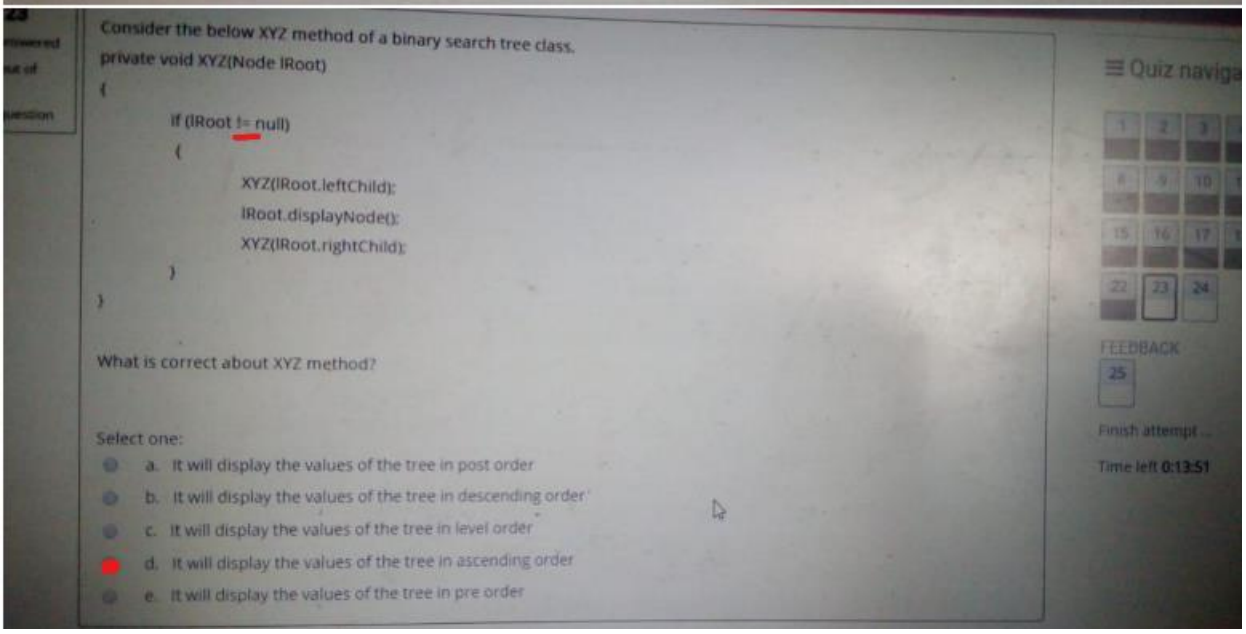
A queue also known as a
Select one:
a. Array data structure
b. First In Last Out data structure
c. Last In First Out data structure
d. It depends on the Queue type
e. First In First Out data structure


Consider the below XYZ method of a binary search tree class.
private void XYZ(Node IRoot)
{
if (IRoot != null)
{
XYZ(IRoot.leftChild);
IRoot.displayNode();
XYZ(IRoot.rightChild);
}
}
What is correct about XYZ method?
Select one:
a. It will display the values of the tree in post order
b. It will display the values of the tree in descending order
c. It will display the values of the tree in level order
d. It will display the values of the tree in ascending order
e. It will display the values of the tree in pre order
Quiz naviga
FEEDBACK
Finish attempt ...
Time left 0:13:51

The Post-order traversal of a binary tree is P Q R S T. Then possible Pre-order traversal will be

Select one:

- a. P Q R T S
- b. T R P Q S
- c. T R P S Q
- d. T R Q P S
- e. T R Q S P

Question 23

Not yet answered

Marked out of 1.00

Flag question

Consider the below link lists given in diagram A and diagram B. Find the code segment to convert diagram A to diagram B.

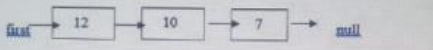



Diagram A

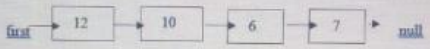



Diagram B

Select one:

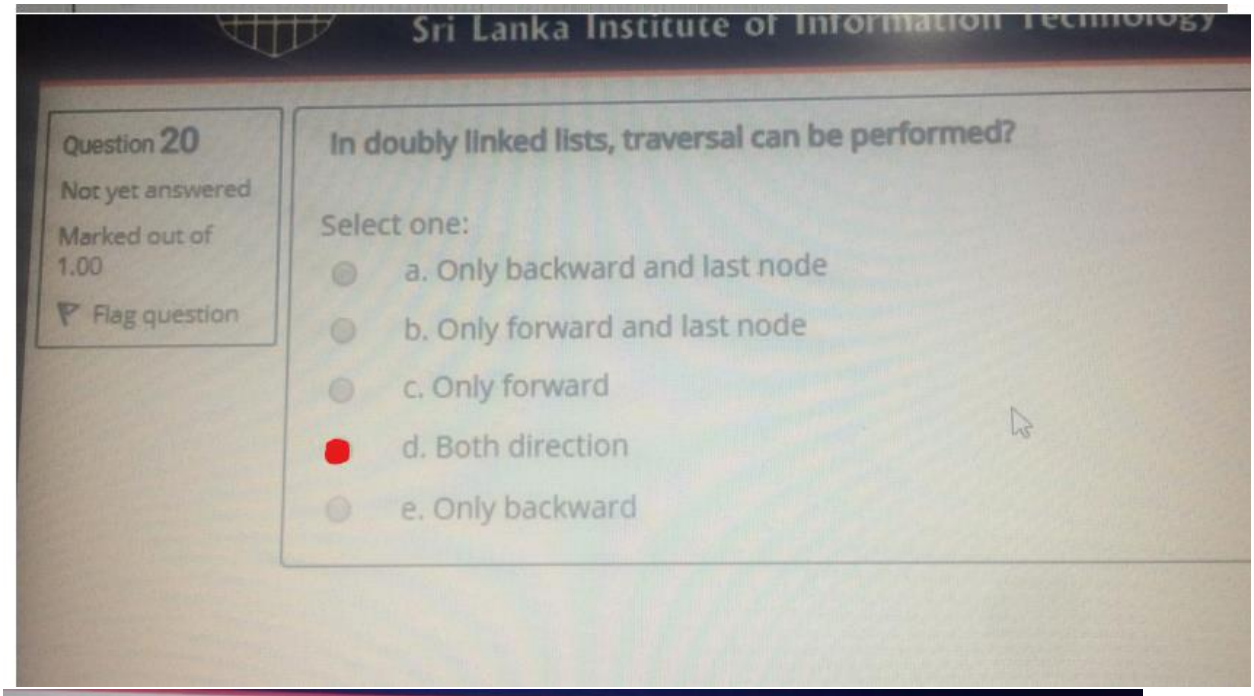
a.
```
Link nLink = new Link(6);
first.next.next = nLink;
nLink.next = first.next.next;
```

b.
```
First.next.next = newLink;
```

c.
```
Link nLink = new Link(6);
nLink.next = first.next.next;
first.next.next = nLink;
```

d.
```
first.next = newLink;
newLink.next = first.next;
```

e. None of the mentioned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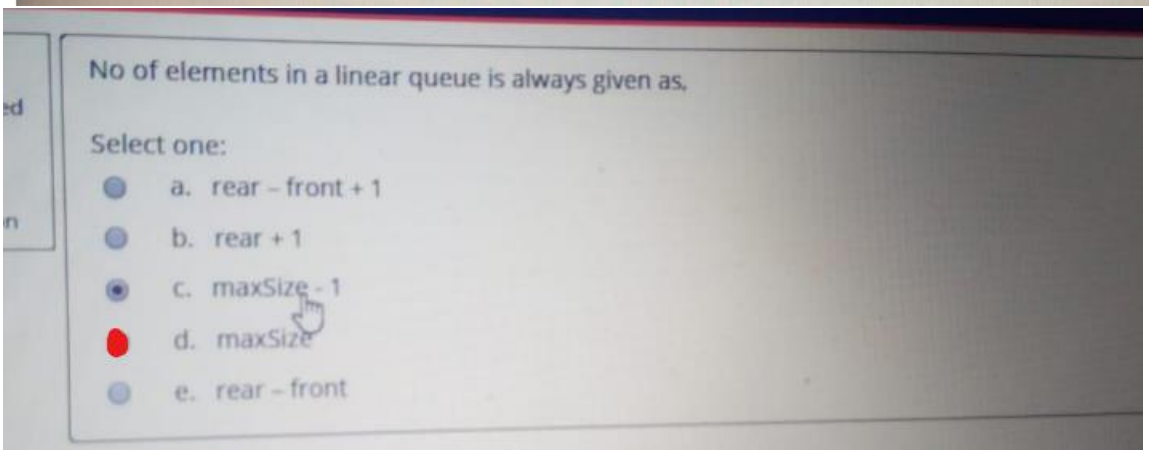
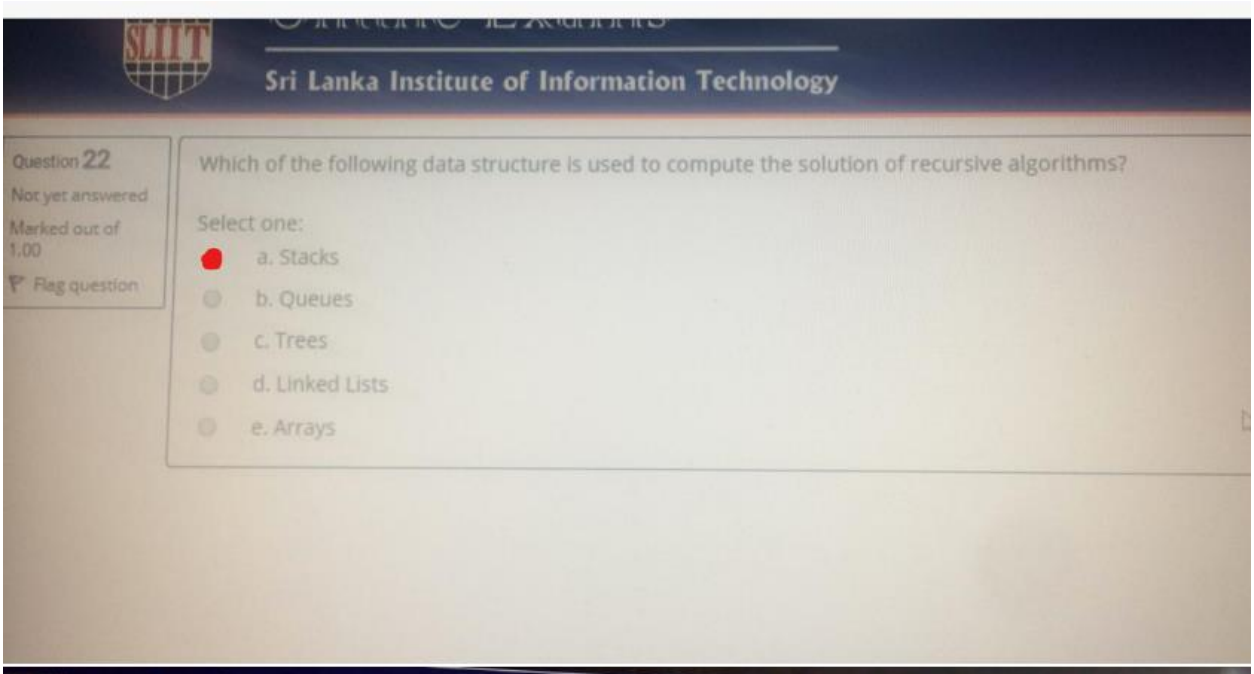
Question 20
Not yet answered
Marked out of 1.00
Flag question
In doubly linked lists, traversal can be performed?
Select one:
a. Only backward and last node
b. Only forward and last node
c. Only forward
d. Both direction
e. Only backward


No of elements in a linear queue is always given as.
Select one:
a. rear – front + 1
b. rear + 1
c. maxSize - 1
d. maxSize
e. rear – front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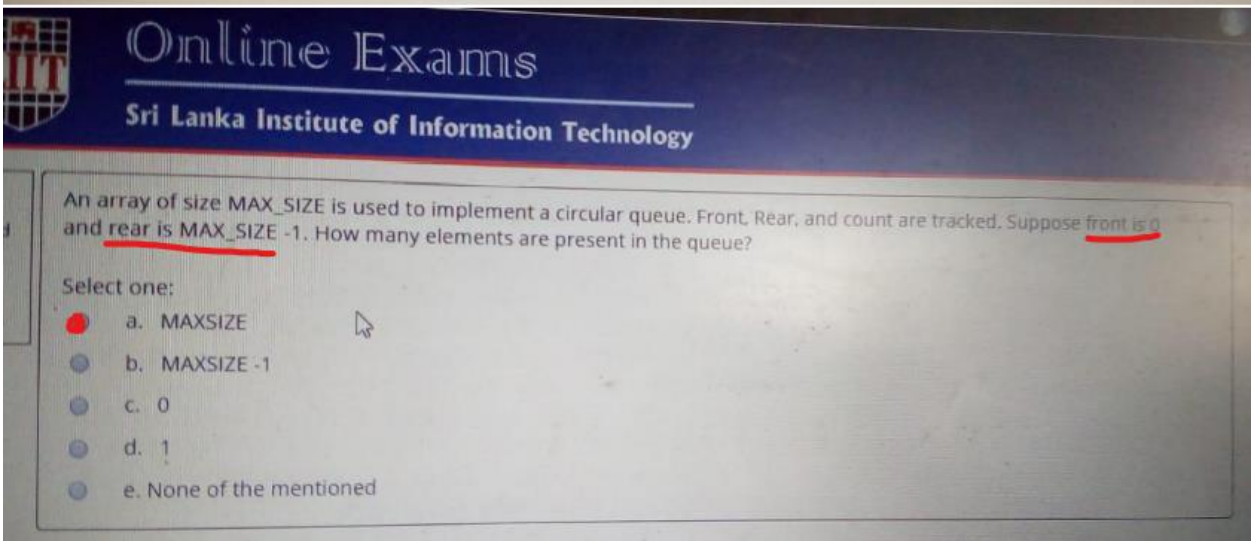
Question 22
Not yet answered
Marked out of 1.00
Flag question
Which of the following data structure is used to compute the solution of recursive algorithms?
Select one:
a. Stacks
b. Queues
c. Trees
d. Linked Lists
e. Arrays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An array of size MAX_SIZE is used to implement a circular queue. Front, Rear, and count are tracked. Suppose front is 0 and rear is MAX_SIZE -1. How many elements are present in the queue?
Select one:
a. MAXSIZE
b. MAXSIZE -1
c. 0
d. 1
e. None of the mentioned