C Quiz DS 2 Linked List(09-12-2023)

1. what is wrong about singly linked list?

Answers

1. Singly linked list is a collection of nodes linked together in a sequential way where each node of singly linked list contains a data field

2. singly list is an address field which contains the reference of the next node.

3. Singly linked list can contain multiple data fields but should contain at least single address field pointing to its connected next node.

4. None Of Above

2. what does following function do of given Linked List with first node as head?

```
void function(struct node* head)
{
  if(head == NULL)
    Return;

  function(head->next);
  printf("%d  ", head->data);
}
```

Answers

1. Print all linked lists

2. Prints all linked list in reverse order

3. Prints alternate Linked List

4. Prints alternate linked list reverse order

3. which statement is True about circular linked list?

Answers

1. Entire list can be traversed from any node.

2. Circular lists are the required data structure when we want a list to be accessed in a circle or loop.

3. Despite of being singly circular linked list we can easily traverse to its previous node, which is not possible in singly linked list.

4. All of Above

4. following code define in c programming language

```
struct node
{
int data;
struct node * next;
}
typedef struct node NODE;
NODE *ptr;
```

Which of the following c code is used to create new node?

Answers

1. ptr=(NODE*)malloc(sizeof(NODE));

2. ptr=(NODE*)malloc(NODE);

3. ptr=(NODE*)malloc(sizeof(NODE*));

4. ptr=(NODE)malloc(sizeof(NODE));

5. What is the output of the following code for start pointing to first node of the given list? 1->2->3->4->5->6

```
 void Linkedlist(struct node* start)
{
if(start == NULL)
       return;
printf("%d",start->data);

if(start->next != NULL)
  Linkedlist(start->next->next);
printf("%d",start->data);
}
```

6. Which of the following data structure/s is not suitable to implement Binary Search?

Answers

1. LinkedList

2. Array

3. Tree

4. Both Options A & B

7. .In a singly circular linked list, insertion of a node at first position requires modification of a?

Answers

1. One pointer

2. Two pointer

3. Three pointer

4. None

8. We can merge two lists and this task can be performed in O(1) time. Which of the following variations of the linked list can be used?

Answers

1. Singly linked list

2. Doubly linked list

3. Circular doubly linked list

4. Array implementation of list

9. Consider the following doubly linear linked list and find the output of given code:


```
trav= tail;

while(trav!=NULL && trav->prev!=NULL)

{

   print("%d-->",trav->data);

   trav = trav->prev->prev;

}
```

Answers

1. 5-->3-->1

2. 5-->4-->3-->2-->1

3. 5-->3-->

4. 1-->3-->5

10. Below one is add_first() functionality code for empty Doubly CircularLinked list. Find the correct statement to replace ????

```
head = newnode;

tail = newnode;

tail ->next = head;

????
```

Answers

1. tail->next->next = tail

2. head->prev = tail;

3. tail->prev = head;

4. head->prev = NULL;

---------- Compiled by Utkarsh Singh ----------