Week 5 Quiz

The due date for submitting this assignment has passed. Due on 2018-03-14, 23:59 IST. As per our records you have not submitted this assignment.

1) Is the following structure declaration correct?

```c
struct employee{
    int empno;
    char ename[20];
    float salary;
    struct date{
        int day;
        int month;
        int year;
    }doj;
}emp;
```

- Yes
- No

No, the answer is incorrect.
Score: 0
Accepted Answers: Yes

2) Which of the following is correct about the keyword typedef in C?

- It can only be used to assign names to user defined data types.
- It can be used to assign alternative names to predefined data types.
- Both a & b
- None of the above.

No, the answer is incorrect.
Score: 0
Accepted Answers: Both a & b

3) Find the output of the following program.

```c
#include<stdio.h>
```

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https://onlinecourses-archive.nptel.ac.in/noc18_cs25/unit?unit=69&assessment=74
Programming Assignment 5.1: Reverse a linked list

struct Point{
    int x;
    int y;
} p1;

int main()
{
    p1 point1={10,20};
    p1 point2=point1;
    printf("%d", point2.y);
    return 0;
}

- 10
- 20
- Compilation error
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
Compilation error

4) Interpret what the following function does.

struct Node{
    int value;
    Node* next;
}
void dosomething(struct Node** head, int key)
{
    struct Node* temp=*head;
    struct Node* prev;
    if (temp!=NULL && temp->data==key)
    {
        *head=temp->next;
        free(temp);
    }
    while (temp!=NULL && temp->data!=key)
    {
        prev=temp;
        temp=temp->next;
    }
    if (temp==NULL)
        printf("node is not present in the linked list");
    else
        prev->next=temp->next;
    free(temp);
}

- It inserts an element key in the linked list.
- It deletes the first occurrence of key in the linked list.
- It deletes all the occurrences of key in the linked list.
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
It deletes the first occurrence of key in the linked list.
5) Which of the following is incorrect in context of pointer to structures?

Assumption:
typedef struct student
{
    int rollno;
    char name[20];
}s;
s *st;

- (*st).name
- st->name
- s->name
- None of above

No, the answer is incorrect.
Score: 0
Accepted Answers:
s->name

6) A node in a linked list is defined as:

typedef struct node {
    int data;
    struct node* next;
}Node;

List has elements 4->5->3->2->1->2.

The following function is executed.
int fun(struct Node *head, int index) {
    struct Node* current = head;
    int count=0;
    while (current != NULL)
    {
        if(count == index)
            return current->data;
        count++;
        current=current->next;
    }
}

Variable head stores the pointer to the head of the list.

What is the output of print(head,2)?

- 4
- 2
- 1
- 5

No, the answer is incorrect.
Score: 0
Accepted Answers:
5

7) Choose the correct statements.

- Members of a class are private by default and members of struct are public by default.
- Members of a class are public by default and members of struct are public by default.
Members of a class are private by default and members of struct are private by default.

No, the answer is incorrect.
Score: 0

Accepted Answers:
Members of a class are public by default and members of struct are private by default.

8) Given two structures a1, a2 as defined below, how will you compare the two structures

struct A {
    int a;
};
struct A a1,a2;

- a1==a2
- a1.a==a2.a
- Both A & B
- a1 and a2 cannot be compared.

No, the answer is incorrect.
Score: 0

Accepted Answers:
a1.a==a2.a

9) Which of the following is the correct way to dynamically allocate space to a 1D array?

- int *arr=(void*)malloc(size*sizeof(int))
- int *arr=(int*)malloc(size*sizeof(int))
- int *arr=(int*)malloc(sizeof(int))
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
int *arr=(int*)malloc(size*sizeof(int))

10) In general, List ADT allows:

- Insertions and deletions anywhere.
- Insertions and deletions only at one end.
- Insertions at back and deletions at the front.
- Insertions at the front and deletions at the back

No, the answer is incorrect.
Score: 0

Accepted Answers:
Insertions and deletions anywhere.