

1. What is lvalue Error and Write an example program that generates lvalue Error?

2. Write The Output Of The Given Following Snippet (Pseudocode)

```
int main()
{
    char v = 'a';
    printf("V = %c , V = %d\n",v,v);
    v = v*2;
        printf("V = %c , V = %d\n",v,v);
}
```

3. Write A Program Subtracting of Two Numbers by Using Bitwise Operations?

4. Write a program to find the number of set bits present in the given number?

Ex: Input = 12  
Ouput = 2

5. Write A Program To Find The Size Of The integer without using sizeof operator ?

6. Write the output of the following snippet ( Pseudocode) and Why?

```
#include <stdio.h>

void func(int , int);
int main() {
    int num = 12,num1=23;
    int ret = func(num,num1);
    printf("Ret = %d\n",ret);
}

void func(int a , int b)
{
    return a+b;
}
```

7. What is the output of following snippet?

```
#include <stdio.h>
int main() {
    int a = 10, b = 20;
    int *p1 = &a, *p2 = &b;
    *p1 = ++*p2++;
    printf("A = %d B = %d\n", a, b);
    return 0;
}
```

8. Write the output of the following snippet?

```
#include <stdio.h>

int main() {
```

```

    const int x = 10;
    int *p = (int*)&x;
    *p = 20;
    x = 30;
    printf("%d\n", x);
    return 0;
}

```

9. Write a program convert string to integer without using predefined functions?

Input = "123" Output = 123

10. Write a program swapping of two variables using pointers and without using third pointer variable?

Write A Program To Swap the given two strings?

```

Input :
    char *str = "Hyderabad"
    char *str1 = "Bangalore"
Output:
    Str = "Bangalore"
    Str1 = "Hydreabad"

```

11. Write a program to find the second large and first large elements in a array without sorting of an array?

```

Input:
    int arr[]={23,12,11,6,32,21,9,45};
Output:
    First_Large = 45;
    Second Large = 32;

```

12. Write a program to find the missing odd number in a sequenced array?

```

Input:
    int arr[] = {3,5,9,13,15};
Output:
    Missing Nums = 7,11

```

13. Write A Program To Find The Binary Of a Given Decimal Number Using Bitwise Operations?

```

Input : num = 13.4
Output : 0100000101010110011001100110

```

14. Write a program of adding, subtracting, multiplying, dividing of three numbers using function pointers?

15. Write a C program that takes a string as input and converts all uppercase letters in the string to lowercase and all lowercase letters to uppercase.

```

Input:
    Enter a string: "VivEn EmBeDded ACadeMy";

```

Output:

```
Output = "vIVeN eMbEdDED acADEmY";
```

16. Write a program/function removing of a node at a given position in a single linked list?

Input:

```
2----->3--->7--->5--->9
```

Enter the Pos = 2

Output:

```
2----->3--->5--->9
```

17. Write A Program to Detect the Cycle into a single linked list and Remove the cycle?

18. Write a function/program to check if a singly linked list is a palindrome or not?

Input:

```
1 ----> 2 -----> 3 -----> 2 -----> 1
```

Output:

Palindrome

Input:

```
1 -----> 2 -----> 3 -----> 4
```

Output:

Not Palindrome

19. Write a program add the node in the middle of the single linked list?

Input:

```
1----->2----->3----->4--->5
```

Node = 6

Output:

```
1--->2----->3--->6--->4--->5
```

20. What are the types of pointers and write a example program for each pointer type?