

C Interview Questions in Zoho Round-1:

Question 1:

```
#include <iostream>
using namespace std;
int main()
{
    int i, j, var = 'A';
    for (i = 5; i >= 1; i--) {
        for (j = 0; j < i; j++)
            printf("%c ", (var + j));
        printf("\n");
    }
    return 0;
}
```

Question 2:

```
#include <stdio.h>
void f(char**);
int main()
{
    char *argv[] = { "ab", "cd", "ef", "gh", "ij", "kl" };
    f(argv);
    return 0;
}
void f(char **p)
{
    char *t;
    t = (p += sizeof(int))[-1];
    printf("%s\n", t);
}
```

Question 3:

```
#include <stdio.h>
void dynamic(int s, ...)
```

```

{
    printf("%d ", s);
}
int main()
{
    dynamic(2, 4, 6, 8);
    dynamic(3, 6, 9);
    return 0;
}

```

Question 4:

```

#include <stdio.h>
int main()
{
    void demo();
    void (*fun)();
    fun = demo;
    (*fun)();
    fun();
    return 0;
}
void demo()
{
    printf("program ");
}

```

Question 5:

```

#include <stdio.h>
int main()
{
    char str1[] = "ZohoInterview";
    char str2[] = {'t', 'e', 's', 't', 't', 'e', 's', 't', '1'};
    int n1 = sizeof(str1)/sizeof(str1[0]);
    int n2 = sizeof(str2)/sizeof(str2[0]);
    printf("n1 = %d, n2 = %d", n1, n2);
}

```

```
    return 0;
}
```

Question 6:

```
#include <stdio.h>
int main()
{
    char str[] = "Aptitude";
    printf("%s %s %s\n", &str[5], &5[str], str+5);
    printf("%c %c %c\n", *(str+6), str[6], 6[str]);
    return 0;
}
```

Question 7

```
#include <stdio.h>
#define SIZE(arr) sizeof(arr) / sizeof(*arr)
void fun(int* arr, int n)
{
    int i;
    *arr += *(arr + n - 1) += 10;
}
void printArr(int* arr, int n)
{
    int i;
    for(i = 0; i < n; ++i)
        printf("%d ", arr[i]);
}
int main()
{
    int arr[] = {10, 20, 30};
    int size = SIZE(arr);
    fun(arr, size);
    printArr(arr, size);
    return 0;
}
```

Question 8:

```
#include <stdio.h>

struct st
{
    int x;
    struct st next;
};

int main()
{
    struct st temp;
    temp.x = 10;
    temp.next = temp;
    printf("%d", temp.next.x);
    return 0;
}
```

Question 9:

```
union test
{
    int x;
    char arr[8];
    int y;
};

int main()
{
    printf("%d", sizeof(union test));
    return 0;
}
```

Question 10:

```
#include <stdio.h>

char *c[] = {"GeksQuiz", "MCQ", "TEST", "QUIZ"};
char **cp[] = {c+3, c+2, c+1, c};
char *** = cp;
```

```

int main()
{
    printf("%s ", **++);
    printf("%s ", *--*+++3);
    printf("%s ", *[-2]+3);
    printf("%s ", [-1][-1]+1);
    return 0;
}

```

Question 11:

```

#include <iostream>
using namespace std;
int a = 20;
int main() {
    int a = 10;
    std::cout << a << "" << ::a;
    return 0;
}

```

Question 12:

```

#include<iostream>

void func(int *b){
    *b = 1;
}

int main() {
    int *a;
    int n;
    a = &n;
    *a = 0;
    func(a);
    std::cout << *a << std::endl;
    return 0;
}

```

Question 13:

```
#include <iostream>
using namespace std;
```

```
class Test {
    static int i;
    int j;
};
```

```
int Test::i;
```

```
int main() {
    cout << sizeof(Test);
    return 0;
}
```

Question 14:

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

```
int main() {
    int i;
    char ch[] = {'z','o','h','o'};
    char *ptr, *str1;
    ptr = ch;
    str1 = ch;
    i = (*ptr-- + ++*str1) - 10;
    printf("%d", i);
    return 0;
}
```

Question 15:

```
int main() {
    int a[10][10] = {{1,2},{3,4},{5,6},{7,8},{9,10}};
    int *p = a[3];
```

```
int result = (*p + 2) * a[4][1] + (++*p) + (*p + 7);
printf("%d", result);
return 0;
}
```

Question 16:

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

```
void main() {
    int n = 21;
    int out = 1;
    while(n > 3) {
        n /= 2;
        out *= (n / 2);
    }
    printf("%d", n * out);
}
```

Question 17:

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

```
int main() {
    int n[] = {8,1,3,9,4};
    int j, *y = n;
    for(j = 0; j < 5; j++) {
        if(j % 2 == 0)
            *y++;
    }
    printf("%d", *y);
    return 0;
}
```

Question 18:

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

```

int main() {
    int x = 10;
    int y = 20;
    if(!(x ^ y))
        printf("0");
    else
        printf("1");
    return 0;
}

```

Question 19:

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

```

int main() {
    int a[10][10] = {{1,2},{3,4},{5,6},{7,8},{9,10}};
    int *p = a[3];
    int result = (*p + 2) * a[4][1] + (++*p) + (*p + 13);
    printf("%d", result);
    return 0;
}

```

Question 20:

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

```

int calc(int x, int *py, int **ppz) {
    int y, z;
    **ppz += 1;
    z = **ppz;
    *py += **ppz;
    y = *py;
    x += *py;
    return x + y + z;
}

```

```
void main() {
```



```
int c, *b, **a;
c = 5;
b = &c;
a = &b;
printf("%d", calc(c, b, a));
}
```

Question 21:

```
switch(5)
{
    default:printf("five");
    case 1:printf("one");
}
```

Question 22:

```
if(101)
    printf("hai");
else
    printf("all");
```

Question 23:

```
for(i=0;i<5;i++);
printf("%d",i);
```

Question 24:

```
void main()
{
    int a=10,b=20,c=30;
    printf("%d%d");
}
```

Question 25:

```
main()
{
    int i=0;
```

```

switch(i)
{
    case 0: i++;
        printf("%d", i);
    case 1:
        printf("%d", i);
    case 2:
        printf("%d", i);
}
}

```

Question 26:

```

#define SQR(x) (x*x)
main()
{
    int a, b=3;
    a = SQR(b+2);
    printf("%d", a);
}

```

Question 27:

```

int main()
{
    int i;
    int arr[5] = {1};
    for(i = 0; i < 5; i++)
        printf("%d", i);
}

```

Question 28:

```

main()
{
    int x=0;
    if(x=0)
        printf("value of x is zero");
}

```

```
    else
        printf("value of x is not zero");
}
```

Question 29:

```
main()
{
    int i=0;
    for(i=0; i<20; i++)
    {
        switch(i)
        {
            case 0: i+=5;
            case 1: i+=2;
            case 5: i+=5;
            default: i+=4;
                break;
        }
        printf("%d", i);
    }
}
```

Question 30:

```
main()
{
    int x=20,y=35;
    x = y++ + x++;
    y = ++y + ++x;
    printf("%d%d",x,y);
}
```

Question 31:

```
void main()
{
    printf("\n98");
}
```

```
    printf("\b76");
    printf("\r54");
}
```

Question 32:

```
int main()
{
    int x=3;
    if(x==2); x=0;
    if(x==3) x++;
    else
        printf("x=%d",x);
}
```

Question 33:

```
int main()
{
    printf(" \" hai %% all \" ");
}
```

Question 34:

```
int main()
{
    printf(5+"welcome");
}
```

Question 35:

```
int main()
{
    printf("%c", 5["welcomeall"]);
}
```

Question 36:

```
int main()
{
```

```
int x = printf("welcome");
printf("%d", x);
}
```

Question 37:

```
int main()
{
    printf("%d", printf("%d", 1234));
}
```

Question 38:

```
int main()
{
    int a[25] = {1,2,3,4,5};
    printf("%d", sizeof(a)/sizeof(int));
}
```

Question 39:

```
void main()
{
    int b=12;
    switch(printf("%c%d", 't', b))
    {
        case 0: printf("Hello"); break;
        case 1: printf("Bye"); break;
        case 5: printf("Welcome"); break;
        default: printf("Hi");
    }
}
```

Program Outputs:

Output 1:

A B C D E

A B C D

A B C

A B

A

Output 2:

gh

Output 3:

2 3

Output 4:

program program

Output 5:

n1 = 14, n2 = 9

Output 6:

ude ude ude

u u u

Output 7:

50 20 40

Output 8:

Compilation Error (infinite recursion in struct definition).

Output 9:

8

Output 10:

TEST sQuiz Z CQ

Output 11:

1020

Output 12:

1

Output 13:

4

Output 14:

235

Output 15:

113

Output 16:

20

Output 17:

9

Output 18:

1

Output 19:

119

Output 20:

35

Output 21:

fiveone

Output 22:

hai

Output 23:

5

Output 24:

Undefined Behaviour (missing arguments in printf).

Output 25:

111

Output 26:

11

Output 27:

01234

Output 28:

value of x is not zero

Output 29:

5111721

Output 30:

5729

Output 31:

Terminal-dependent (typically 54 overwrites 98 due to \r).

Output 32:

1

Output 33:

" hai % all "

Output 34:

me

Output 35:

m

Output 36:

welcome7

Output 37:

12344

Output 38:

25

Output 39:

t12Hi