



Focus Academy for Career Enhancement

An IIM Graduates' Enterprise

TECHNICAL

Certain questions are self-explanatory. Thus detailed solutions are provided only wherever required.

1. What the below statement will print if a=5?

`printf("%d %d",a, !a++);`

- a. 5 0 b. 6 0 c. 5 1 d. 6 1

Answer: B

Explanation:

Values in the function get passed from right to left.
First `!a++` get processed which pass zero as argument and make a equal to 6

2. What is the output?

```
#include<stdio.h>
int main()
{
    int i, j, *ptr, *ptr1;
    i = 10;
    j = 10;
    ptr = &i;
    ptr1 = &j;
    if(ptr == ptr1)
    {
        printf("True");
    }
    else
    {
        printf("False");
    }
}
```

- a. 1 b. False c. Compiler Error d. No output

Answer: B

Explanation:

In this program we are comparing the addresses contained by `ptr` & `ptr1` not the value at those addresses and pointers `ptr` and `ptr1` have the addresses of different variables so above condition is false

3. How many times `main()` will get called?

```
#include<stdio.h>
main()
{
    printf("\n Main Called Again");
    main();
}
```

- a. Error b. Infinite times
c. No output d. None of these

Answer: B

Explanation:

There is no condition in the `main()` to stop the recursive calling of the `main()` hence it will be called infinite no of times.

4. Comment on the following?

`const int *ptr;`

- a. You cannot change the value pointed by `ptr`
b. You can change the value of the pointer
c. None of these
d. You can change the pointer as well as the value pointed by it

Answer: A

Explanation:

Value of the pointer cannot be changed when `const` keyword is used

5. What is the output of the following program?

```
#include<stdio.h>
void main(){
    int a;
    a='a'>'A';
    printf("%d",a);
}
```

- a. NULL b. Error c. 0 d. 1

Answer: D

Explanation:

ASCII codes are compared. 'A' is 65 while 'a' is 97

6. What is the output of the following program?

```
#include<stdio.h>
void main(){
    int a;
    a=1;
    while(a<=10){
        printf("%d ",a);
        if(a>3)
            break;
        a++;
    }
    printf("%d",a+10);
}
```

- a. 1 2 3 4 10 b. 1 2 3 4 14
c. 1 2 3 13 d. 1 2 3 14

Answer: B

Explanation:

1,2,3,4 are printed. When a value is greater than 4, if condition becomes true and break is executed. (4+10)14 is printed

7. Which of the following does not initialize ptr to null (assuming variable declaration of a as int a=0)?

- a.int *ptr = &a; b. int *ptr = &a - &a;
c.int *ptr = a -a; d. None of these

Answer: A

Explanation:

In *ptr = &a, the address of a is stored in pointer. In other cases, it is 0

8. What is the output of the following program?

```
#include<stdio.h>
void main(){
    printf("1");
    goto XYZ;
    printf("2");
XYZ:
    printf("3");
}
```

- a. 3 b.13 c. 123 d. 12

Answer: B

Explanation:

go to statement jumps program execution to the label XYZ and skips 2.

9. The statement that transfers control to the beginning of the loop is called _____.

- a. Break statement b. Exit statement
c. Goto statement d. continue statement

Answer: D

Explanation:

Continue statement continues with the next iteration of the loop

10. What is the output of following program?

```
#include<stdio.h>
void main(){
    int a;
    float f;
    a=13/2;
    f=13/2;
    printf("%d %f",a,f);
}
```

- a. 6 6.500000 b. 6 6.5
c. 6 6.000000 d. None of these

Answer: C

Explanation:

Solution of 13/2 is obtained as an integer and decimal values are dropped before assigning to f