

1. `int x=5, y=6; int z = x=!++y; printf("%d %d %d",x,y,z);` -- what would be printed?
☐ 5, 6, 1 ☐ 5 6 1 ☐ 5 7 1 ☐ 0 7 0 ☐ 7 2 8 ☐ 5 6 0 ☐ 1 7 1
2. Which of the following(s) is/are not a part of C Compiler?
☐ Control Statements ☐ C Character Set ☐ Java VM ☐ Keywords ☐ Library Functions ☐ Byte Code
3. 4096 Mega Pixels = ____ Giga Pixels
☐ 2^2 ☐ 2 ☐ 2^6 ☐ 2^{-3} ☐ 2^9 ☐ 1 ☐ 4
4. Which of the following characteristics best describes the best output within a short time?
☐ Integrity ☐ Clarity ☐ Simplicity ☐ Efficiency ☐ Modularity ☐ Generality ☐ Complexity
5. `int x=3, y=4; int z=(x>5&& y+6<9?(x<y?x+y:(++x)-(y--)): (++x>y?x+y:x-y))-!0;` -- what is the value of x, y, z respectively?
☐ 4, 3, 1 ☐ 3, 3, -1 ☐ 4, 4, 0 ☐ 3, 4, 7 ☐ 4, 4, -1 ☐ 2, 5, 0 ☐ Compilation Error
6. Which of the following characteristics refers to overall readability of a program?
☐ Integrity ☐ Clarity ☐ Simplicity ☐ Efficiency ☐ Modularity ☐ Generality ☐ Complexity
7. What is the binary representation of -1?
☐ all zeros ☐ all ones ☐ all zeros but LSB ☐ all ones but LSB ☐ all ones but MSB ☐ not possible
8. `int i,n=10; for(i=2;n;n+=-i) printf("k%c", 'm'-i);` -- How many times k would be printed?
☐ 5 ☐ 10 ☐ 50 ☐ 1000 ☐ 2 ☐ Infinite ☐ 0
9. `{ if(y) x = x * y - 9; }` -- which one of the following best describes the outer most statement?
☐ expression statement ☐ compound statement ☐ control statement ☐ gone true
10. How many possible combinations in a nibble?
☐ 128 ☐ 256 ☐ 512 ☐ 1024 ☐ 2^4 ☐ 8 ☐ 4^3
11. 16 bytes = ____ bits
☐ 128 ☐ 256 ☐ 512 ☐ 1024 ☐ 2^4 ☐ 8 ☐ 4^2
12. `#define x int main(){return 0;}` -- Is it a valid c program?
☐ No, Compilation Error ☐ No, Runtime Error ☐ Yes, but no output ☐ Yes, Output: x
13. Which of the following is correct for precedence of the operators in C? Operators are enclosed in [].
☐ `[++] > [==]` ☐ `[sizeof] < [/]` ☐ `[&&] > [||]` ☐ `[<=] > [==]` ☐ `[/] > [*]` ☐ `[=] > [!]` ☐ `[sizeof] > [+]`
14. You have to keep an integer ranges $\sim 10^{14}$. How many bits would you prefer to take?
☐ 2^{64} ☐ 2 ☐ 2^8 ☐ 8 ☐ 2^{18} ☐ 128 ☐ 64
15. How many bytes a long long type variable owns?
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 8 ☐ 6 ☐ 8^2
16. 2 bytes = ____ bits
☐ 128 ☐ 256 ☐ 512 ☐ 1024 ☐ 2^4 ☐ 8 ☐ 4^2
17. Among the followings, which one have the increment/decrement section in its structure?
☐ if ☐ else ☐ while ☐ do-while ☐ for ☐ switch ☐ break
18. What is the maximum value we could store in a single-precision floating point number approximately?
☐ 10^9 ☐ 10^{81} ☐ 10^{18} ☐ 10^{38} ☐ 10^{308} ☐ 10^{-38} ☐ 0
19. Which of the following(s) are the invalid name(s) of variable in C language?
☐ wow_ ☐ Golden%wing ☐ student name ☐ std_neme ☐ std_Neme ☐ cse-19 ☐ 0_zero
20. `char z = ____;` --if the gap is filled up by the following, then which of them would assign null character in z?
☐ null ☐ NULL ☐ 0 ☐ \0 ☐ '\0' ☐ "\0" ☐ 00
21. What is the 20-th Lucas Number (L_{20})? Let, $L_0 = 2, L_1 = 1$.
☐ 9349 ☐ 15127 ☐ 24476 ☐ 39603 ☐ 6765 ☐ 4181 ☐ 20
22. Which of the followings are valid expressions?
☐ `a+b;` ☐ `c = a + b` ☐ `++i` ☐ `i++` ☐ `c <= d` ☐ `c == 9;` ☐ `c != k;;;`
23. `int y = 10, k; k = (y!=0); k += (y!=5); printf("%d\n", k);` - What would be the output?
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 10 ☐ 6 ☐ 8^2
24. When we would need to give a name, we would follow the rules of Identifier, but it can't be _____.
☐ Case-sensitive ☐ a Keyword ☐ a GUI ☐ Compiler ☐ Interpreter ☐ None
25. `int x = strlen("This is a \0\0 char");` --what would be the value of x?
☐ 12 ☐ 17 ☐ 11 ☐ 10 ☐ 20 ☐ 4 ☐ 19
26. Which of the following characteristics best describes the work of decomposition?
☐ Integrity ☐ Clarity ☐ Simplicity ☐ Efficiency ☐ Modularity ☐ Generality ☐ Complexity
27. Which of the following(s) are valid declaration(s) for keeping a non-negative integer ranges $\sim 10^{19}$?
☐ unsigned ☐ long long int ☐ unsigned int ☐ signed long int ☐ int ☐ unsigned long long
28. Suppose, a number 14 is printed with the specifier '%x'. Which of the following would be printed?
☐ A ☐ 14 ☐ F ☐ f ☐ 16 ☐ e ☐ E
29. Suppose, a number could be written in binary as $111.1011 \times 2^{-110100101}$. How many bits it would take to keep the exponent?
☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 2^4 ☐ 118 ☐ 188
30. `unsigned short int y;` --which one of the following indicates the range of y?
☐ 0 to +65536 ☐ 0 to +65535 ☐ 1 to +65536 ☐ -32768 to +32768 ☐ -32768 to +32767