True or False?

1. **TRUE/FALSE** - A 2s-complement 2-byte integer can be copied into a 32-bit register using the movzwl instruction.

2. **TRUE/FALSE** - On a 64-bit architecture, casting a C long int to a double does not lose precision.

3. **TRUE/FALSE** - A logical shift of a 2s-complement number by 3 bits to the right (**>>** 3) is the same as dividing by 8.

4. **TRUE/FALSE** - In C, the length of string is always in an int at the starting address of the string.

5. **TRUE/FALSE** - In both C and Java it is possible to determine the address of a struct/object within an array of structs/objects.

6. **TRUE/FALSE** - Total internal fragmentation in a struct can’t be more than its largest element.

7. **TRUE/FALSE** - An instruction cache takes advantage of both spatial and temporal locality.

8. **TRUE/FALSE** - To be able to write a correct program, a developer needs to know cache sizes.

9. **TRUE/FALSE** - Caches copy frequently used memory to faster storage to speed-up execution.

10. **TRUE/FALSE** - On a 32-bit architecture, if a cache block is 128 bytes, and there are 1024 sets in the cache, the tag will be 17 bits.

11. **TRUE/FALSE** - A process’s stack is typically in a segment of memory that is not executable.

12. **TRUE/FALSE** - When executing a fork, a child process is given the same process ID as its parent.

13. **TRUE/FALSE** - A TLB is used in an MMU to cache page table entries.

14. **TRUE/FALSE** - A parent process and its children share the same memory address space.

15. **TRUE/FALSE** - C generally has better performance than Java.