If the compiler optimized for speed, "a" would have no offset, "b" would have an offset of 8, "c" would have an offset of 16, and "d" would have an offset of 24. "b", "c", and "d" would have padding before to optimize for speed, the compiler would equally space out the offset for each member in memory. The total size of the Whatever is 32 bytes.

If the compiler optimized for memory, "a" would have no offset, "b" would have an offset of a, "c" would have an offset of 6, and "d" would have an offset of 7. The total size of Whatever is 15 bytes.