

- A) The reason the readers-writers problem fails to work is because the inside the read function (if readcount == 0 up(&writer)) is not inside the critical section. This means that it could be accessed from another reader function. In that case the program could face a deadlock in which that results in a never signal of writer function.
- B) The reason the readers-writers problem fails to work is because the file leaves the program at the same time. Since "writer" is not in critical section, the program has the option of allowing another reader to access and change the value before it, leading to a dead lock.
- C) The reason the readers-writers problem fails to work is because a case will happen where a writer writes on a file when the reader is trying to read it. This occurs as the writer is in critical section while the reader is outside, which may lead to a possibility where the reader is reading while the writer is also writing.