Copilot

Certainly! When using `scanf` in C, it's essential to understand how it handles whitespace characters, including newlines.

1. **Whitespace Matching in `scanf`:**
   - `scanf` (and similar functions) treat white space in the format string as matching an arbitrary amount of white space in the input.
   - In the default "C" locale, a newline character (`'\n'`) is classified as white space.
   - This means that if you have a format like `%2000s %2000[^\\n]%c`, it will match not only a newline but also any succeeding white space.
   - To read input until a newline is found, you can modify your format string like this:
   - The `%c` at the end captures the newline character if it's present, allowing you to differentiate between a complete line and a longer input.
2. **Additional Tips:**
   - Consider checking the return value of `scanf` to ensure that all conversions were successful (in this case, you'd look for a return value of 3).
   - If you encounter issues with trailing newlines, you can use `getchar()` to read an extra newline after `scanf`.

Remember that `scanf` reads input until it encounters newline, whitespace, or EOF (end of file) [1] [2] [3] [4]. Happy coding! 🚀

Source(s)

1. How to read from input until newline is found using scanf()?
2. Problem With Using fgets()/gets()/scanf() After scanf() in C
3. scanf and newlines in c - Stack Overflow
4. C programming quick tips: The tricky scanf function - LinkedIn
5. Scanf() Function in C Programming – TecAdmin