

34.- ft_putnbr_fd . -

BSD Man Page References:

- `write(2)`: Used for writing data to a file descriptor.

Synopsis:

```
void ft_putnbr_fd(int n, int fd);
```

Purpose:

Writes a decimal representation of an integer to a specified file descriptor.

Description:

The `ft_putnbr_fd` function takes two arguments:

- `n`: The integer to be printed.
- `fd`: The file descriptor to write to.

Code explanation:

```
void ft_putnbr_fd(int n, int fd)
{
    long ln = n; // Use a long to handle potential overflow

    if (ln < 0) // Handle negative numbers
    {
        ft_putchar_fd('-', fd); // Print a minus sign
        ln *= -1; // Make the number positive for digit processing
    }

    if (ln <= 9) // Base case: single-digit number
    {
        ft_putchar_fd(ln + '0', fd); // Print the digit character
    }
    else // Recursive case: multi-digit numbers
    {
        ft_putnbr_fd(ln / 10, fd); // Print the higher digits first
        ft_putnbr_fd(ln % 10, fd); // Print the last digit
    }
}
```

- Prints digits in reverse order (higher digits first) due to recursion.
- Uses `write` for low-level data writing.

Example usage (main function):

```
int main(void)
{
    int fd = 1; // Standard output
    int n = -2147483648;

    ft_putnbr_fd(n, fd); // Prints "-2147483648" to standard output
    printf("\n");
}
```

```
    return (0);  
}
```

Additional notes:

- Consider using `long long` instead of `long` for wider integer ranges.
- Ensure proper error handling when using `write`.
- This function demonstrates a recursive approach to printing numbers.