**explanation**

I start by opening a noisy black-and-white X-ray image. Then, I use something called a median filter to clean it by removing random black and white dots. This filter checks the nearby dots and picks the middle value to replace the noisy ones. If needed, I can also use a mean filter, which averages nearby dots to make the image smoother, though it might blur some details. Finally, I show the original and cleaned images side by side, so it's easy to see the difference. This makes the image clearer by getting rid of the unwanted noise.