Let S be the number of times that the result was odd, which is a binomial random variable, with parameters $n = 100$ and $p = 0.5$, so that $\mathbf{E}[S] = 100 \cdot 0.5 = 50$ and $\sigma_S = \sqrt{100 \cdot 0.5 \cdot 0.5} = \sqrt{25} = 5$. Using the normal approximation to the binomial, we find

$$\mathbf{P}(S > 55) = \mathbf{P}\left(\frac{S - 50}{5} > \frac{55 - 50}{5}\right) \approx 1 - \Phi(1) \approx 1 - 0.8413 = 0.1587.$$

A better approximation can be obtained by using the de Moivre-Laplace approximation, which yields

$$\begin{aligned}\mathbf{P}(S > 55) = \mathbf{P}(S \geq 55.5) = \mathbf{P}\left(\frac{S - 50}{5} \geq \frac{55.5 - 50}{5}\right) \\ \approx 1 - \Phi(1.1) \approx 1 - 0.8643 = 0.1357.\end{aligned}$$