Photon Antibunching refers to a light field where the photon distribution is sub-poissonian. And, we know that the variance and mean of the photon number operator $\hat{n}$ are related to the second order correlation function according to the following relation

$$\frac{\delta\hat{n} - \langle\hat{n}\rangle}{\langle\hat{n}\rangle^2} = g^{(2)}(0) - 1$$

When we say the distribution is sub-poissonian or super-poissonian, what we mean is that $\delta\hat{n} < \langle\hat{n}\rangle$ and $\delta\hat{n} > \langle\hat{n}\rangle$ respectively. So, in case of antibunched photons, we have sub-poissonian photon statistics, implying that

$$g^{(2)}(0) < 1$$

The exact opposite scenario to this is called Photon Bunching, where we observe super-poissonian photon statistics, i.e. $\delta\hat{n} > \langle\hat{n}\rangle$ or, in terms of the second order correlation function,

$$g^{(2)}(0) > 1$$

We also know, that the correlation function $g^{(2)}(0)$ is defined as,

$$g^{(2)}(0) = \frac{\left\langle\hat{a}^\dagger\hat{a}^\dagger\hat{a}\hat{a}\right\rangle}{\langle\hat{n}\rangle^2}$$

Which essentially corresponds to observing two photons at the detector simulatinously. For a coherent photon state, we have $g^{(2)}(0) = 1$. Hence, for a bunched state there's a higher probability of a detector observing two photons at once than that for a coherent state. The opposite is true for a antibunched state.