Q 1. If \((X, \mathcal{B}, \mu)\) is a finite measure space, say for instance \(\mu(X) = 1\), then show that
\[
L_p(X, \mathcal{B}, \mu) \subset L_{p'}(X, \mathcal{B}, \mu)
\]
for \(p \geq p' \geq 1\).

Q 2. For a function \(f \in \bigcap_{p \geq 1} L_p(X, \mathcal{B}, \mu)\) when is
\[
\lim_{p \to \infty} \|f\|_p < \infty ?
\]
If it is finite what is its value?