1. Calculate $\Gamma(b \rightarrow ce\nu_e)$ as a function of $m_b$ and $m_c$. Use the experimental values of $m_b$, $m_c$ and $|V_{cb}|$, which you can find in the Particle Data Book, to evaluate it. Compare this with the experimental value for $\Gamma(B \rightarrow X_c e\nu_e)$ ($X_c$ is anything formed by charm quark) which can be extracted from information in the Particle Data Book.