Part I

Stochastic learning

Exercise 1. $(\star)$Let $f : \mathbb{R}^d \to \mathbb{R}$ such that $f(w) = g(<w, x> +y)$ or some $x \in \mathbb{R}^d$, $y \in \mathbb{R}$. If $g$is convex function then $f$is convex function.