# Spoken Tutorial, IIT Bombay <br> https://spoken-tutorial.org 

## Scilab - FOSSEE Optimisation Toolbox <br> Constrained Optimization- Assignment

Minimise the following objective function:

$$
f(x)=\left(2 \pi x_{1} x_{2}+2 \pi x_{1}^{2}\right) * 400 ;
$$

subjected to the given constraints:

$$
\begin{aligned}
x_{1}+x_{2} & \leq 12 \\
200-\pi x_{1}^{2} x_{2} & \leq 0 \\
x_{1}, x_{2} & \geq 0 \\
x_{0}=[1,2] &
\end{aligned}
$$

