Latex macros

```
In [1]:
         %latex
         $$
         \newcommand{\x}{\mathbf{x}}}
         \newcommand{\tx}{\tilde{\x}}
         \newcommand{\v}{\mathbf{v}}}
         \newcommand{\b}{\mathbf{b}}}
         \newcommand{\c}{\mathbf{c}}}
         \newcommand{\e}{\mathbf{e}}}
         \newcommand{\z}{\mathbf{z}}}
         \newcommand{\h}{\mathbf{h}}}
         \newcommand{\v}{\mathbf{v}}}
         \newcommand{\w}{\mathbf{w}}}
         \newcommand{\W}{\mathbf{W}}}
         \newcommand{\X}{\mathbf{X}}}
         \newcommand{\KL}{\mathbf{KL}}}
         \newcommand{\E}{{\mathbb{E}}}}
         \newcommand{\ip}{\mathbf{{(i)}}}}
         % Test set
         \newcommand{\xt}{\underline{\x}}
         \newcommand{\yt}{\underline{\y}}
         \newcommand{\Xt}{\underline{\X}}
         \newcommand{\perfm}{\mathcal{P}}}
         % \ll indexes a layer; we can change the actual letter
         \newcommand{\ll}{l}
         \mbox{newcommand}{\lp}{\{(\ll)\}}
         \newcommand{Thetam}{\Theta {-0}}}
         %
         % \tt indexes a time step
         \newcommand{\tt}{t}
         \mbox{newcommand} \tp} {\{(\tt)\}}
         \newcommand{\loss}{\mathcal{L}}}
         \newcommand{\cost}{\mathcal{L}}}
```

```
%
\newcommand{\pdata}{p \text{data}}}
\newcommand{\pmodel}{p \text{model}}
%
% SVM
\newcommand{\margin}{{\mathbb{m}}}
\newcommand{\lmk}{\boldsymbol{\ell}}
% Functions with arguments
\def\xsy#1#2{#1^#2}
\def\rand#1{\tilde{#1}}
\def\randx{\rand{\x}}
\def\randy{\rand{\v}}
\def\trans#1{\dot{#1}}
\def\transx{\trans{\x}}
\def\transy{\trans{\y}}
\def\argmax#1{\underset{#1} {\operatorname{argmax}} }
\def\argmin#1{\underset{#1} {\operatorname{argmin}} }
\def\max#1{\underset{#1} {\operatorname{max}} }
\def\min#1{\underset{#1} {\operatorname{min}} }
\def\pr#1{\mathbf{p}(#1)}
\def\cnt#1{\mathcal{count} {#1}}
\def\node#1{\mathbb{#1}}
\newcommand{\floor}[1]{\left\lfloor #1 \right\rfloor}
\newcommand{\ceil}[1]{\left\lceil #1 \right\rceil}
%
$$
```

Store cell 1 as a macro (need to change line number if above