1 Motivation

So I wanted a package that allowed me to mix-and-match exercises. I couldn't find it, so I made it.

2 Flow/Moderate start

I suspect that working with this package will break you current flow. So let's go throught it.

This package assumes you put all of your exercises within the folder named $\mathtt{exercises}^1$

```
cxercises/myexercise.tex

\begin{intro}
  This introduces our problem
\end{intro}
\begin{problem}
  This is a partproblem 1,
   and will be hidden (just wait, you'll see)
\end{problem}
\begin{problem}
  This is a partproblem 2.
  This will not be hidden, but become part problem a!
\end{problem}
```

Let's build all of them first. In the main file, (the one where you include this package):

```
main.tex

\documentclass{article}
\usepackage{exbank}
\makeset{myExerciseSet}{myexercise}
\begin{document}
\buildset{myExerciseSet}
\end{document}
```

This builds the entire set, and adds Problem header and partproblem counters ((1a) and (1b)) by default.

¹I applogize, but I haven't gotten the formatting right here. So there will *either* be no indentations or no colors in my examples. I'm so sorry. Truly.

2.1 Select

Now, let's build only the second problem.

```
main.tex

\documentclass{article}
\usepackage{exbank}
\makeset{myExerciseSet}{\select{myexercise}{2}}
\begin{document}
\buildset{myExerciseSet}
\end{document}
```

This should only build the intro and the one exercise you $??^{\rightarrow P.??}$ ed! Now, say you want to hide the intro. Well all you have to do in this case is make the package treat the intro as a problem in regards to what is $??^{\rightarrow P.??}$ ed. Just add the optional argument $[\langle intro \rangle]$ to \make. That is switch

```
\makeset{myExerciseSet}{\select{myexercise}{2}}
```

with

```
\makeset[intro]{myExerciseSet}{\select{myexercise}{3}}
```

Notice that there are 3 'partproblems' now since we have to count the intro!

2.2 Exclude

But what if you have an exercise with 12 partproblems, and you only want to exclude the 7th partproblem? Well, then **\Exclude** is here to rescue the day for you.

```
\makeset{myExerciseSet}{\exclude{soManyExercises}{7}}
```

Here it's important to note that the [intro] argument would not make the intros disappear. If we wanted to only exclude the intro from our previous example file exercises/myexercise.tex we would do

```
\label{lintro} $$\max_{makeset[intro]{myExerciseSet}{\left(exclude{myexercise}{1}\right)}$}
```

So we're excluding the partproblem 1. But that's the intro when we send the [intro] optional argument

2.3 Multiple

In \makeset you can just separate exercises with commas! Here is an example: Let's say you have two files with exercises. One located in exercises/circuits/RLC.tex and one in exercises/ohm/ohmsGeneralLaw.tex, and you want to include part-problem 1 through 5 from RLC.tex and all of the exercises from ohmsGeneralLaw.tex.

This will divide it up with problem headers. So that what is in the RLC.tex-file will be Problem 1, and ohmsGeneralLaw.tex Problem 2.

2.4 Mixnmatch

What if you want to make both of them the same exercise? Well, then you pass the [nohead] argument to \makeset:

The **\phead** command makes a problem header. You can pass them as much as you want:

That covers the basics.

3 Reference

content