# Manual of lingproblems

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### 1 Setup

If you do not install the package on your local computer to make it accessible for all the files, TEX will automatically look for the .sty file in your local folder in which you store your main .tex file. It means that you should save .sty file in that folder. In this case, you need to include the following in your TeX documents (which means that the file lingproblems.sty in the same directory as your .tex file):

\usepackage{./lingproblems}

If you want to install this package on your local machine and use it globally, I would recommend typing in your favourite web search machine: how to install .sty package and eventually attaching the name of your favourite editor. The question is for sure answered. The number of possiblities for each operating system and each editor is huge, although the general way to do it, is to make a new directory with the name of the package, i.e. lingproblems, in the path where other directories of other packages are stored. Then copy the .sty file to the newly created directory. After that, you will need to update the whole with directories. On UNIX-based suystems it can be done with

#### \$ sudo mktexlsr

or something similar. Then you can normally import the package with the following command:

\usepackage{lingproblems}

## 2 The environment problem

This environment allows adding a new linguistic problem. The format of such a problem is based on the format used at the International Linguistics Olympiad (ILO), a worldwide contest in linguistics for high-school students held anually. Every problem consists of a problem statement, assignments and a short information about the language the problem is about. Also, a single problem might include an introduction as well as a short explanation of some unusual phonemes used in the problem. Students usually do not need any prior knowledge about the language to complete the assignments.

At an instance of the environment problem we generally pass two arguments: the name of the problem and the author of the problem. They will be later used in the formatting of the whole statement. Let us look at an example.

\begin{problem}{Cyrillic script}{Andrei Smirnov}
Here you write your problem statement.
\end{problem}

The preceding will produce (without the box):

#### Cyrillic script

Here you write your problem statement.

Also there is an option not to input and show any name of the problem. This can be achieved by using problem\* instead. Please note that you will still need to provide an author or leave the curly braces empty.

<sup>&</sup>lt;sup>1</sup>On my machine it is: /usr/share/texlive/texmf-dist/tex/latex/

```
\begin{problem*}{Andrei Smirnov}
Here you write your problem statement.
\end{problem*}
```

The preceding will produce (without the box):

Here you write your problem statement.

#### 2.1 The environment tasks

In this environment (inside a problem) the assignments are set. Every assignment (or task, simply) is initiated with a command \task{}. It generates a bullet of the following form: (a). Bold, small letters of the Latin alphabet are used. Again, it follows some tradition of the ILO.

There is also an option to include a task with an indicated number of points. You can achieve this by using \taskp{}{} instead, whereby you write the number of points as the second argument.

```
\begin{problem}{Cyrillic script}{Andrei Smirnov}
Here you write your problem statement.
```

```
\begin{tasks}
\task{The first task.}
\taskp{The first task.}{10 points}
\end{tasks}
```

\end{problem}

The preceding will produce (without the box):

#### Cyrillic script

Here you write your problem statement.

- (a) The first task.
- (b) The first task.

[10 points]

#### 2.2 The environment langinfo

As mentioned above, you generally want to add some info about the language the problem is about. To do that, you can use this environment. It will automatically generate the danger symbol  $\underline{\wedge}$  and add the author of the problem at the end. This a general standard at the International Linguistics Olympiad.

```
\begin{problem}{Cyrillic script}{Andrei Smirnov}
Here you write your problem statement.
```

```
\begin{tasks}
\task{The first task.}
\end{tasks}
\begin{langinfo}
This language is a member of the F family It
```

This language is a member of the F family. It is spoken in X by Y speakers.\\
These are some unusual phonemes used in the problem: \'a.
\end{langinfo}

\end{problem}

The preceding will produce (without the box):

### Cyrillic script

Here you write your problem statement.

(a) The first task.

 $\underline{\wedge}$  This language is a member of the F family. It is spoken in X by Y speakers. These are some unusual phonemes used in the problem: á.  $-Andrei\ Smirnov$ 

You can also ommit the author at the end by using the environment langinfo\* instead. In this case, the second argument of \begin{problem}{}{} will not be used at all, so you can leave it empty.

\begin{problem}{Cyrillic script}{}
Here you write your problem statement.

\begin{tasks}
\task{The first task.}
\end{tasks}

\begin{langinfo\*}

This language is a member of the F family. It is spoken in X by Y speakers.\\
These are some unusual phonemes used in the problem: \'a.\\end{langinfo\*}

\end{problem}

The preceding will produce (without the box):

#### Cyrillic script

Here you write your problem statement.

(a) The first task.

## 3 Example

Please view example.pdf and example.tex which demonstrates the usage of this package on an example.