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6th February 2017

Music Informatics
Non-Assessed Practical

In this practical you are asked to use and extend a small musical grammar. You will be given feedback on your submission. There is no credit for this, but the main coursework for the course is on a very similar topic.

Background

Grammar

The grammars are written using Prolog's built-in grammar formalism.

You should read appropriate background on this, if you don't know it already. Only very basic knowledge of Prolog is needed, apart from the grammar formalism. The formalism allows Prolog procedures to be interleaved with the parsing process; it also allows generation of grammatical output.

See the on-line book on Prolog "Learn Prolog Now":

```
http://www.learnprolognow.org/
```

especially lectures 7 & 8.

Music

We are looking at simple melodies, using the `abc` notation. A quick glance at the web-site will give the basic idea.

```
http://abcnotation.com/
```

We will not use repetition symbols.

This notation has been used for fairly large collections of music melodies which fit more or less in the main western music framework. See

```
http://abcnotation.com/tunes#historical
```

for some examples.

The task

There is a small grammar with some examples that are parsed by the grammar on the course web page under practicals.

Using the Grammar

1. Give two other examples of melodies that are accepted by the grammar, and two that are not accepted. Say briefly where the parsing breaks down in the latter case, and why.

2. Extend the grammar to allow larger coverage, while keeping the idea of one harmony per bar. You should allow a broader notion of pitches associated with a particular harmony, and also some additional harmonies. Give two examples of melodies accepted by the new grammar, but not the original grammar.

Deadline

Submission is due on

<div align="center">Tuesday 28nd February.</div>

Please email your submission as a text file or pdf to `A.Smaill@ed.ac.uk`. Submissions should include the grammars you developed, and the example melodies (eg as comments in the code).