Functional Programming and Specification Examination

1. The exam lasts two hours.

2. Place your student identity card face-up on the desk in front of you. The invigilator may come to check your identity, and in this case you may be asked to allow the invigilator to briefly use your computer. The exam time has been calculated to allow time for such interruptions.

3. You may log into your computer as soon as you are ready to do so.

4. Open a terminal window and copy the file `sets.sml` into your home directory:

    ```
    cp /group/examreadonly/sets.sml $HOME
    ```

    Do nothing further until the start of the exam is announced!

5. Once the exam starts, you may use any tools available under DICE, including Moscow ML which you can start by typing `mosml` at the command line. Compile, run and debug your programs as usual.

6. Save your answers in files with the names indicated on the exam paper. Submit your answers using the command

    examsubmit *FileName.sml*

    where *FileName.sml* is the name of the required ML source file. If you get an error, please check carefully that you are using the correct filename and that you are in the same directory as the file. If you continue to have problems, please contact one of the invigilators.

    You are recommended to save your work on a regular basis. Repeated submit commands are allowed, and will overwrite previous submissions. The last file submitted for any question will be the one marked.

7. ML documentation is available by pointing your browser at:

    ```
    file:///group/examreadonly/fps.html
    ```

    Here you will find the Moscow ML library documentation and an excerpt from the Moscow ML Language Overview listing all the built-in functions, which library modules are preloaded by default, etc.

    You may use any part of the Moscow ML system and libraries as installed on DICE. **Note that internet access has been disabled.**

8. When the invigilators announce the end of the exam, you must submit and log out immediately.

Guidelines

In the answer to any part of any question, you may use functions specified in an earlier part of that question. You may do this whether or not you actually provided a definition for the earlier part; nor will you be penalized in a later part if your answer to an earlier part is incorrect.