

Solutions 0

Guidelines

While we acknowledge that beauty is in the eye of the beholder, you should nonetheless strive for elegance in your code. Not every program which runs deserves full credit. Make sure to state invariants in comments which are sometimes implicit in the informal presentation of an exercise. If auxiliary functions are required, describe concisely what they implement. Do not reinvent wheels, and try to make your functions small and easy to understand. Use tasteful layout and avoid long winded and contorted code. None of the problems requires more than a few lines of SML code.

Problem 0: Setup your account (10 points)

Set up your account in the zoo. Edit the .emacs file, so that you can use the sml mode in emacs.

Problem 1: A taste of SML (20 points)

This problem is meant to ensure that you can write a program and send it to the SML compiler.

1. Strings

Define a variable called `name` whose value is a string containing your name. So `name` will have type `string`.

```
val name : string
    = "Carsten"
```

2. Integers

Define a function called `square` which, when applied to an integer, returns the square of that integer. So the type of `square` will be `int -> int`.

```
val square : int -> int
    = fn x => x * x
```

Hand-in Instructions

In the course directory `/c/cs201/bin`, there are five programs that support you in submitting your solution to the homework.

```
submit    assignment-number file(s)
unsubmit  assignment-number file(s)
check     assignment-number
protect   assignment-number file(s)
unprotect assignment-number file(s)
```

`submit` allows you to submit one of several files. For example

```
/c/cs201/bin/submit 1 hw1.sml hw1-examples.sml
```

submits your file `hw1.sml` and `hw1-examples.sml`. `check` can give you the peace of mind that your solution has really been submitted, and if you would like to make last minute changes to your solution, use `unsubmit` before submitting the updated version. `protect` and `unprotect` give you the power to protect/unprotect submitted solutions from deletion.