(CSCI 421 VA) Project One My First ML Project

Objectives:

1. Install Standard ML of New Jersey to your computer
2. Write/Run SML functions on Standard ML of New Jersey Interactive System
3. Write the SML functions in a text editor, then run the code on Standard ML of New Jersey Interactive System

Functions to Write:

1. Write a function cube of type int → int that returns the cube of its parameter
2. Write a function sqsum of type int → int that takes an non-negative integer n and returns the sum of the squares of all the integers 0 through n. Your function need not behave well on negative input.
3. Write a function max of type int list → int that returns the largest element of a list of integers. Your function need not behave well if the list is empty. (refer to exercise 13 on page 85 of the textbook)

Steps to Finish the Project:

Step One: Install Standard ML of New Jersey to your computer.
To install on Window, please watch the video
https://www.youtube.com/watch?v=hDkG2aH2iqU
To install on Mac, you may watch the video at https://youtu.be/qdUnCK85CoI

Step Two: Write all functions in a text editor and save the file as YourNameProjOne.sml.

Step Three: Run your code and test the correctness with data

Open terminal window. Use command **ls** see the folders/files in current folder. Use command **cd ..** to go into upper level folder. Use command **cd folder_name** to go to the subfolder. Navigate to the folder where you saved YourNameProjOne.sml file.

Now type command: **sml**
Then type command: **use "YourNameProjectOne.sml"**
The file name must be in " ". If everything is correct, your functions are ready to use.

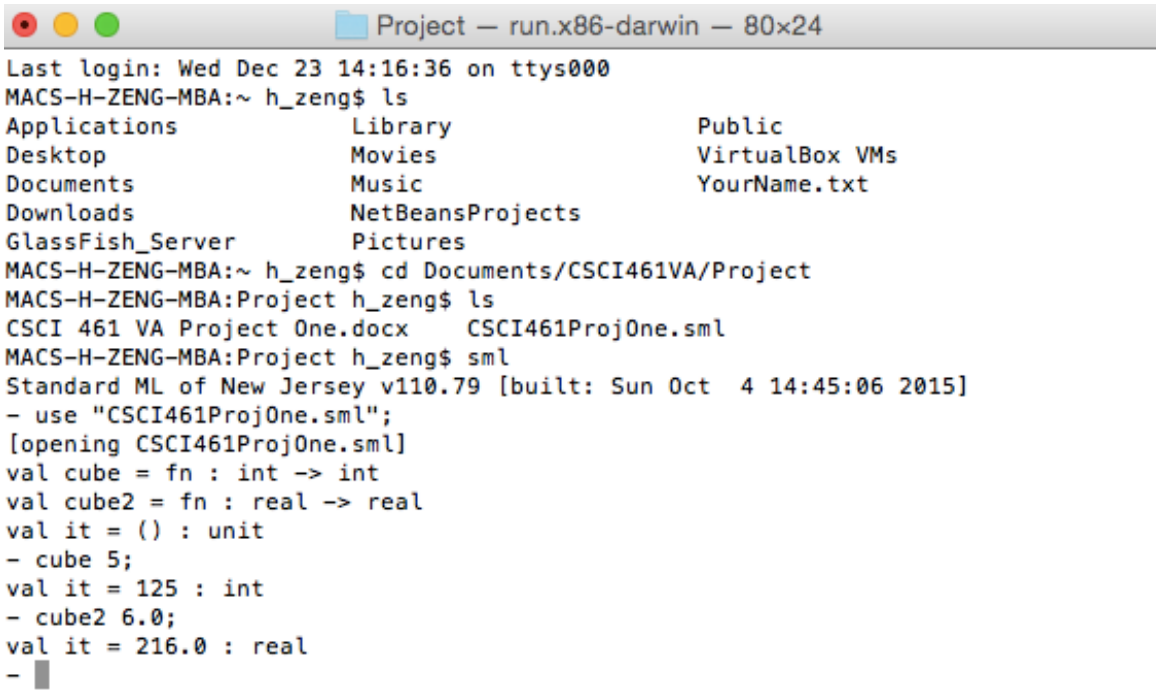
Sample Run on My Computer: my file was saved as CSCI461ProjOne.sml in folder Documents/CSCI461VA/Project. The file name is: CSCI461ProjOne.sml. It contains the following code:

```
(* this is problem one *)
fun cube x = x*x*x;

(* this is problem two *)
fun cube2 x:real = x*x*x;
```

Here (* … *) are comments

Here is the screen shot for what I have done:



The due date will be announced on Blackboard.