

1. List the members of your group below. Underline your name.

2. For each of the following *Standard ML* expressions, provide the response when that expression is evaluated by the `sml` REPL (read-eval-print loop). Assume that the expressions are evaluated in the order listed. In your response, *draw a **box** around the **type** and **oval** around the **value***. (If there is an error then clearly explain the error.)
 - (a) `42.42 / 2.0;`
 - (b) `"My name is nil.";`
 - (c) `42 / 2;`
 - (d) `fun f101(x) = x + 101;`
 - (e) `f101(101);`
 - (f) `fun f201 (nil) = nil
| f201 (h::t) = h :: f201(t);`

3. Provide *Standard ML* expressions for each of the following.
 - (a) Bind the identifier `score` to the integer 42.
 - (b) Multiply the integer bound to `score` by 2.

4.
 - (a) Define a recursive function (of your choice) that is **not** *tail recursive*, using Standard ML.
 - (b) Define another recursive function (also of your choice) that is *tail recursive*, using Standard ML.
 - (c) **Explain your answers.**

5. Provide the *Standard ML* definition of a recursive function `f301` that takes a list of integers as argument and returns a similar list with each element incremented by 100. For instance, when invoked on the list `[3, 1, 4]`, the list `[103, 101, 104]` should be returned. Explain why your answer is correct. Trace the operation of your function on the list `[3, 1, 4]`.