COMP 302
Final Exam Review

Winter 2015

1 Basic SML

1.1 Binding and Functions

1.2 Structural Induction and Recursion

1.3 Lists

1.4 Datatypes

2 Intermediate SML

2.1 Polymorphism

2.2 Binary Trees

2.3 Function as results

2.4 Higher Order Functions

2.5 Tail Recursion

3 Advaced SML

3.1 Continuation Programming Style

3.2 Exceptions

3.3 References

3.4 Environmental Model

Replaces the substitition model to handle references

3.5 Streams

4 Language Design

1. BNF (Backus-Naur-Form) definitions

2. Operational Semantics: notation for describing the semantics. Meaning of an expression (recursive evaluation)

Notes

- Grammar gives information about the language

- We can write evaluators (complicated to work with the language).