

# cs113 Lab Build Script

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Text written to file build.sh

| *doctex lab.doc*

| *pptexenv latex lab.tex*

| *dvipdf lab.dvi*

Bourne Shell

| *chmod 777 build.sh*

# All the SML

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SML

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(* how to define a set in SML? *)
(* use a list *)
val A = [3,1,2]; val B = []; val C = [2,3,1]; val D = [2,3,3,1,4];
fun empty([]) = true | empty(_) = false;
empty(A); empty(B);
(* determine if some value is an element of a set *)
fun element(e,[]) = false
  | element(e,(x::xs)) = x=e orelse element(e,(xs));
element(3,A); element(4,A); element(4,C); element(3,C);

(*Is one set a subset of another*)
fun subset([],[]) = true
  | subset([],(x::xs)) = true
  | subset((x::xs),[]) = false
  | subset((x::xs),(y::ys)) = element(x,(y::ys)) andalso subset(xs,(y::ys));
subset(A,C); subset(B,A); subset(A,B); subset(A,D); subset(C,D);
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