Exercise 8.4: Write and solve the constraints that are generated by the inter-procedural sign analysis for the following program:

```
inc(a) {
  return a+1;
}

main() {
  var x,y;
  x = inc(17);
  y = inc(87);
  return x+y;
}
```

解答：

Constraint for entry node v of function inc(a):

$$[\![v]\!] = \sqcup_{\perp}[a \rightarrow \text{eval}([\![w]\!], 17)]$$

$$[\![v]\!] = \sqcup_{\perp}[a \rightarrow \text{eval}([\![w]\!], 87)]$$

Constraint for after-call node v labeled X = □ ,with call node v':

$$[\![v]\!] = [\![v']\!][X \rightarrow [\![w]\!](18)]$$

$$[\![v]\!] = [\![v']\!][X \rightarrow [\![w]\!](88)]$$