CSC 8490
Exercise: Given R=ABCDEFGH, find a minimal cover for the following set of FD's.

ABH->C	BGH->F	E->F
A->D	F->AD	BH->E
C->E		

Step 1) Split the RHS wherever possible and get:

ABH->C	BGH->F	E->F
A->D	F->A	BH->E
C->E	F->D	

Step 2) Shrink the LHS wherever possible:

- ABH->C can become BH->C (exercise for you: why?)
- BGH->F can become BH->F (ditto)

So we're left with

BH->C	BH->F	E->F
A->D	F->A	BH->E
C->E	F->D	

Step 3) Eliminate any redundant FD's (ie, those that can be inferred from the others):

- BH->F is redundant
- F->D is redundant
- BH->E is redundant

What's left is minimal:

BH->C
A->D
C->E
F->A
E->F

We can sketch it as

$$\boxed{\begin{matrix} B \\ H \end{matrix}} ->C->E->F->A->D$$