Exercise 1.5

k = 2

$F_2 = EK$
$c(E \rightarrow K) = 1 \geq 0.8$, so print $E \rightarrow K$
$c(K \rightarrow E) = 4/5 = 0.8$, so print $K \rightarrow E$
$H_1 = \{K, E\}$
GenerateRules stops early since $k = 2 = 1 + 1$

$F_2 = EO$
$c(E \rightarrow O) = 3/4 < 0.8$
$c(O \rightarrow E) = 1 \geq 0.8$, so print $O \rightarrow E$
$H_1 = \{E\}$
GenerateRules stops early since $k = 2 = 1 + 1$

$F_2 = KM$
$c(K \rightarrow M) = 3/5 < 0.8$
$c(M \rightarrow K) = 1 \geq 0.8$, so print $M \rightarrow K$
$H_1 = \{K\}$
GenerateRules stops early since $k = 2 = 1 + 1$

$F_2 = KO$
$c(K \rightarrow O) = 3/5 < 0.8$
$c(O \rightarrow K) = 1 \geq 0.8$, so print $O \rightarrow K$
$H_1 = \{K\}$
GenerateRules stops early since $k = 2 = 1 + 1$

$F_2 = KY$
$c(K \rightarrow Y) = 3/5 < 0.8$
$c(Y \rightarrow K) = 1 \geq 0.8$, so print $Y \rightarrow K$
$H_1 = \{K\}$
GenerateRules stops early since $k = 2 = 1 + 1$

k = 3

$F_3 = EOK$
$c(EK \rightarrow O) = 3/4 < 0.8$
$c(OK \rightarrow E) = 1 \geq 0.8$, so print $OK \rightarrow E$
$c(EO \rightarrow K) = 1 \geq 0.8$, so print $EO \rightarrow K$
$H_1 = \{E, K\}$
$k = 3 > 2 = m + 1$, so GenerateRules continues
$H_2 = \{EK\}$
$c(O \rightarrow EK) = 1 \geq 0.8$, so print $O \rightarrow EK$
Recursive execution of GenerateRules stops early since $k = 3 = 2 + 1$

Printed rules: $E \rightarrow K, K \rightarrow E, O \rightarrow E, M \rightarrow K, O \rightarrow K, Y \rightarrow K, OK \rightarrow E, EO \rightarrow K, O \rightarrow EK$