def parser():

print()

print("TERMINALS:")

print()

a = ("Holmes sat.")

b = ("Holmes lit a pipe.")

c = ("We arrived the day before Thursday.")

d = ("Holmes sat in the red armchair and he chuckled.")

e = ("My companion smiled an enigmatical smile.")

f = ("Holmes chuckled to himself.")

g = ("She never said a word until we were at the door here.")

h = ("Holmes sat down and lit his pipe.")

i = ("I had a country walk on Thursday and came home in a dreadful mess.")

j = ("I had a little moist red paint in the palm of my hand.")

text = []

m = text

m = [a,b,c,d,e,f,g,h,i]

n = a.lower()

o = n.split()

print(o,"\n")

n = b.lower()

o = n.split()

print(o,"\n")

n = c.lower()

o = n.split()

print(o,"\n")

n = d.lower()

o = n.split()

print(o,"\n")

n = e.lower()

o = n.split()

print(o,"\n")

n = f.lower()

o = n.split()

print(o,"\n")

n = g.lower()

o = n.split()

print(o,"\n")

n = h.lower()

o = n.split()

print(o,"\n")

n = i.lower()

o = n.split()

print(o,"\n")

n = j.lower()

o = n.split()

print(o,"\n")

print()

print("NON-TERMINALS:")

print()

print("S -> NP | NP VP | NP Adv | S Conj S | S Conj VP")

print("AdvP -> Adv | Adv AdvP | Adv PP")

print("AP -> Adv Adj | Adj | Adj Conj Adj | Adj PP | ")

print("| Adv Adj PP | Adj AP")

print("CP -> DP Conj DP")

print("DP -> Det NP")

print("NP -> N | AP AP N | P Det N | Det N |")

print("AP N | Det N PP | Det AP N")

print("PP -> P NP")

print("VP -> V | V NP | Adv V NP | V PP | V NP PP | VP Adv P")