#the list of items

atoms=["hydrogen","helium","lithium","beryllium","boron","carbon","nitrogen","oxygen","flourine","neon","sodium","magnesium","aluminium","silicon","phosphorus","sulfur","chlorine","argon","potassium","manganese","iron","cobalt","nickel","copper","zinc","gallium","germanium","arsenic","selenium","bromine","krypton","rubidium","strontium","yttrium","zirconium","niobium","molybdenum","technetium","ruthemium","rhodium","palladium","silver","cadmium","indium","tin","antimony","tellurium","todine","xenon","cesium","barium","lanthanum","cerium","praseodymium","neodymium","promethium","samarium","europium","gadolinium","terbium","dysprosium","holmium","erbium","thulium","ytterbium","lutetium","hafnium","tantalum","tungsten","rhenium","osmium","iridium","platinum","gold","mercury","thallium","lead","bismuth","polonium","astatine","radon","francium","radium"]

#main program

choice=""

while choice !="X":

print("========================")

print(" A T O M F I N D E R")

print("========================")

print("\n")

print("A: Append an atom to the list")

print("B: remove an atom from the list ")

print("C: print the list")

print("D: sort the list")

print("E: the length of the list")

print("F: edit an atom")

print("X: exit the program")

print("\n")

choice=input("choose an option:")

if choice =="A":

name=input("enter the name of an atom to add: ")

atoms.append(name)

print(name,"has been added to the list")

if choice =="B":

name=input("enter the name of an atom to remove:")

atoms.remove(name)

print(name,"has been removed from the list")

if choice=="C":

print(atoms)

if choice =="D":

atoms.sort()

print(atoms)

if choice=="E":

print(len(atoms))

if choice=="F":

print(atoms)

i=int(input("which atom do you want to change "))

atoms[i]=input("enter a new atom")

print(atoms)