#the list of atoms

atoms=["hydrogen","helium","lithium","beryllium","boron","carbon","nitrogen","oxygen","fluorine","neon","sodium","magnesium","aluminum","silicon","phosphorus","sulfur","chlorine","argon","potassium","calcium","scandium","titanium","vanadium","chromium","maganese","iron","cobalt","nickel","copper","zinc","galium","germanium","arsenic","selenium","bromine","krypton","rubidium","strontinum","yttrium","zirconium","niobium","molybdenum","technetium","ruthenium","rhodium","palladium","silver","cadmium","indium","tin","antimony","tellurium","iodine","xenon","cesium","barium","lanthanum","cerium","praseodymium","neodymium","promethium","samarium","europium","gadolinium","terbium","dysprosium","holmium","erbium","thulium","ytterbium","lutetium","hafnium","tantalum","tungstum","rhenium","osmium","iridium","platinum","gold","astatine","radon","francium","radium"]

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 to the list")

 if choice=="C":

 print(atoms)