#the list of atoms

atom=["Hydrogen","Helium","lithium","beryllium","boron","carbon","nitrogen","oxygen","fluorine","neon","sodium","magnesium","aluminum","silicon","phosphorus","sulfur","chlorine","argon","potassium","calcium","scandium","titanium","vanadium","chromium","manganese","iron","cobalt","nickel","copper","zinc","gallium","germanium","arsenic","selenium","bromine","krypton","rubidium","strontium","yttrium","zirconium","niobium","molybdenum","technetium","ruthenium","rhodium","palladium","silver","cadmium","indium","tin","antimony","tellurium","iodine","xenon","cesium"]

#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: Sort the list")

print("D: print the list")

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

print("F:Find an atom in the list")

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 from the list")

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)