#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)