#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.appemd(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)