# the list of items  
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","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"]  
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 atoms in 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?"))