#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)