#the list of atoms

atoms=["hydrogen","helium","lithium","beryllium","boron","carbon","nitrogen","oxygen","Fluorine","neon","sodium","magnesium","aluminium","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","tecnetium","ruthenium","rhodium","palladium","silver","cadmium","indium","tin","antimony","tellurium","iodine","xenon","cesium","barium","lanthanum","cerium","praseodymium","neodyminm","promethium","samarirum","europium","gadalinium","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 lenght of the list")

    print("F: edit an arom")

    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"))

        atoms[i]=input("enter a new atom")

        print(atoms)