### the list of atoms
atoms=["Hydrogen","Helium","Lithium","Berylium","Boron","Carbon","Nitrpgen","Oxygen","Flourine","Neon","Sodium",
"Magnesium","Aluminium","Silicon","Phosphurus","Sulfer","Chlorine","Argon","Potassium","Calcium","Scandium",
"Titanium","Vanadium","Chromium","Manganese","Iron","Cobalt","Nickel","Copper","Zinc","Gallium","Germanium","Aresnic"
,"Selenium","Bromine","Krypton","Rubidium","Strontium","Yttrium","Zirconium","Niobium","Molybdenum","Technetium",
"Ruthenium","Rhodium","Palladium","Silver","Cadmium","Indium","Tin","Antimony","Tellurium","Iodine","Xenon","Cesium"
,"Barium","Lanthanum","Cerium","Praseodymium","Neodymium","Promethium","Samarium","Europium","Gadolinium","Terbium"
,"Dysprosium","Holmium","Erbium","Thulium","Ytterbium","Lutetium","Hafnium","Tantalum","Tungsten","Rhenium","Osmium",
"Tridium","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: Sort the list")
    print("D: Print the list")
    print("E: Print the length of the list")
    print("F: Print 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 from the list")

    if choice=="B":
        name=input("enter the name of the atom to remove:")
        atoms.remove(name)
        print(name, "has been removed from the list")

    if choice=="C":
        atoms.sort()
        print(atoms)

    if choice=="D":
        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)