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', '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', 'Iridium', 'Platinum', 'Gold', 'Mercury', 'Thallium', 'Lead', 'Bismuth', 'Polonium', 'Astatine', 'Radon', 'Francium', 'Radium']

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: print 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 you want 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)