#list of atoms

atoms=["hydrogen","helium","lithum","Beryllium","Boron","Carbon","Nitrogen",

"Oxygen","Fluorine","Neon","Sodium","Magnesium","Aluminum","Silicon","Phosphorus",

"Sulfur","Chlorine","Argon","potassium","calcium","scandium","titanium","vandium"

"chromium","manganese","iron","cobalt","nickel","copper","zinc","gallium","germanium"

"Arsenic","Selenium","Bromine","Krypton","Rubidium","Strontium","Yttrium","Zirconium",

"Niobum","Molybdenum","Technetium","Ruthenium","Rhodium","Palladium","Silver",

"Cadmium","Barium","Lanthanum","Cerium","Praseodymium","Neodymium","Promethium","Samarium",

"Europium","Gadolinium","Terbium",

"Dysporsium","Holmium","Erbium","Thulium","Ytterbium","Lutetium","Hafnium","Tantalium",

"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:apend an atom tp 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.append(name)

            print(name, "has has been added to the list")

        if choice=="B":

            name=input("enter the name of an aton to remove:")

            atoms.remove(name)

            print(name,"has been remove 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]=("enter a new atom")

            print(atoms)

        if choice=="E":

            print(len(atoms))