#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))

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**A T O M F I N D E R**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**A:apend an atom tp the list**

**B:remove an atom from the list**

**C:print the list**

**D: Sort the list**

**E: the length of the list**

**F: edit an atom**

**X:exit the program**

**choose an option:**