### the list of atoms

atoms=["Hydrogen","Helium","Lithium","Berlyium","Boron","Carbon","Nitrogen",

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

,"Sulfur","Chlorine","Argon","Pottasium","Calcium","Scandium",

"Titanium","Vanadium","Chromium","Manganese","Cobalt","Iron","Nickel","Copper",

"Zinc","Gallium","Germanium","Arsenic","Selenium","Bromine","Kyrpton","Rubidium"

,"Strontium","Yttrium","Zirconium","Niobium","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","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","Actinium","Thorium","Protactinium","Uranium","Neptunium","Plutonium",

"Americium","Curium","Berkelium","Californium","Einsteinium","Fermium","Mendelevium","Nobelium",

"Lawrencium","Rutherfordium","Dubnium","Seaborgium","Bohrium","Hassium","Meitnerium","Darmstadtium"

,"Roentgenium","Copernicium","Nihonium","Flerovium","Moscovium","Livermorium",

"Tennessine","Oganesson"]

#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 length of atoms")

 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 a name of an atom to remove from the list")

 atoms.remove(name)

 print(name,"Has been removed")

 if choice=="C":

 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)