#list of atoms

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

"Oxygen","Florine","Neon","Sodium","Magnesium","Aluminium","Silicon",

"Phosphorus","Sulfur","Chlorine","Argon","Pottasium","Calium","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"]

#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: Print the list")

 print("D: Sort 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 to the list")

 if choice=="B":

 name=input("enter the name of an atom 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)