#the list of atoms

atoms=["hydrogen","helium","lithium","Beryllium","Boron","Carbon","Nitrogen","Oxygen","Fluorine","Neon","Sodium","Magnesium","Aluminum","Silicon","Phulfur","Chlorine","Argon","Pottasium","Calcium","Scandium","Titanium","Vanadium","Vanadium","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: Append am atom to 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("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)