#the list of atoms

atoms=["hydogen","helium","lithium","beryllium","boron","carbon","nitrogen",

"oxygen","fluorine","neon","sodium","magnesium","aluminium","silicon","phosphorus",

"sulfer","chlorine","argon","potassium","calcium","scandium","titanium","vanadium",

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

"arsenic","selemium","bromine","krypton","rubidium","strontium","yttrium","zirconium",

"niobium","molybdenem","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 atop from the list")

 print("C: Print the list")

 print("D: Sort the list")

 print("E: Find the length")

 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 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 edit"))

 atoms[i]=input("Enter a new atom")

 print(atoms)