#the list of atoms

atoms=["hydrogen","helium","lithium","beryllium","boron","carbon","nitrogen","oxygen","Fluorine","neon","sodium","magnesium","aluminium","silicon","phosphorus","sulfur","chlorine","argon","potassium","calcium","scandium","titanium","vanadium","chromium","manganese","iron","cobalt","nickel","copper","zinc","gallium","germanium","arsenic","selenium","bromine","krypton","rubidium","strontium","yttrium","zirconium","niobium","molybdenum","tecnetium","ruthenium","rhodium","palladium","silver","cadmium","indium","tin","antimony","tellurium","iodine","xenon","cesium","barium","lanthanum","cerium","praseodymium","neodyminm","promethium","samarirum","europium","gadalinium","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("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:")

 atom.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":

 i=int(i)