atoms=["hydrogen","helium","lithium","beryllium","boron","carbon","nitrogen","oxygen","fluorine"

"neon","sodium","Magnesium","alminuim","silicon","phsphorus","sulfur","chlorine","argon","potassium","calcium","scandium","titanium","vanadium","chromium","maganese","iron"

"cobalt","nickel","copper","zinc","gallium", "germanium","arsenic","selenium","bromine","krypton","rubidium","strontium","yitruim"

"zirconium","niobium","nolybdenum","technetium","ruthenium","rhodium","palladium","silver","cadmium","indium","tin"

,"antimony","tellurium","iodine", "xenon","cesium","barium","lanthanum","cerium","praseodymium","neodymium","promethium","samarium",

"eurpium","gadolinium","terbium","dysprosium","holmium","erbium","thulium","ytterbium","lutetium","hafinum","tantalum"

"tungsten","rhenium","osmium","iridium","platinum","gold","mercury","thalium","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("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 change"))

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

 print(atoms)