#list of atoms

atoms=["hydrogen","helium","lithum","Beryllium","Boron","Carbon","Nitrogen",

"Oxygen","Fluorine","Neon","Sodium","Magnesium","Aluminum","Silicon","Phosphorus",

"Sulfur","Chlorine","Argon","potassium","calcium","scandium","titanium","vandium"

"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:apend an atom tp 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 has been added to the list")

 if choice=="B":

 name=input("enter the name of an aton to remove:")

 atoms.remove(name)

 print(name,"has been remove 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]=("enter a new atom")

 print(atoms)

 if choice=="E":

 print(len(atoms))