#the list of items

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

"Magnesium","Aluminium","Silicon","Phosphurus","Sulfer","Chlorine","Argon","Potassium","Calcium","Scandium",

"Titanium","Vanadium","Chromium","Manganese","Iron","Cobalt","Nickel","Copper","Zinc","Gallium","Germanium","Aresnic"

,"Selenium","Bromine","Krypton","Rubidium","Strontium","Yttrium","Zirconium","Niobium","Molybdenum","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",

"Tridium","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("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)

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