#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","Vandium","Chronium","Manganese","Iron","Cobalt"

,"Nickel","Copper","Zinc","Gallium","Germanium","Arsenic","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","Iridium","Platinum","Gold","Mercury","Thallium","Lead","Bismuth","Polonium","Astatine","Radon","Francium"

,"Radium"]

###main progrm

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 atoms in the list")

 print("E: the length of the list")

 print("F:edit an element")

 print("X: Exit the program")

 print("\n")

 choice=input("choose an option:")

if choice=="A":

 name=input("enter a name of an atom to add: ")

 atoms.append(name)

 print(name, "has been added to the list")

if choice== "B":

 name=input("enter a 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":

 i=int(input("which atom do you want to change? "))

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

 print(atoms)