# 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","zorconium","niobium",

"molybdenum","technetium","ruthenium","rhodium","palladium","silver","cadmium","indium","tin","antimony",

"tellurium","iodine","xenon","cesium","barium","lanthanum","cerium","praseodymium","neodymium","promothium",

"samarium","europium","gadolinium","terbium","dysprosium","helmiun","erbium","thulium","ytterbium","lutetium",

"hafniun","tantalum","tungsten","rhenium","osmuim","irdium","platium","gold","mercury","thallium","lead",

"bismuth","polonium","astatne","radon","francium","radium"]

#main project

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 lenght of the list")

 print("F: edit an atom")

 print("X: exit the project")

 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)