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",

"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"]

choice =""

while choice !="X":

 print("===========================")

 print(" ATOM FINDER ")

 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)