```
In [19]: # Ejercicio 3: para bucles , tienda de fruta
         fruites = {'platan':1.35, 'poma':0.80, 'pera':0.85, 'taronja':0.70}
         def mostrar menu opciones():
             opciones = ["0.Salir", "1.Quina fruita vols?", "2.Quines fruites tenim",
                          "3.Afegir fruita", "4.Eliminar fruita"]
             while opcion not in range(5):
                  print (opciones)
                 try:
                      opcion = int(input("Opcion: "))
                  except Exception as e:
                      print("Opción inválida")
              return(opcion)
         def imprimir_dict():
             for fruita in fruites :
                  print (fruita, fruites[fruita])
         opcion = mostrar_menu_opciones()
         while opcion != 0:
             if opcion == 1:
                  fruita = input("Quina fruita vols? ")
                  print ("el preu de ", fruita, "és", round(fruites[fruita], 2))
             elif opcion == 2:
                  imprimir_dict()
             elif opcion == 3:
                  fruitan = input ("Quina fruita vols vols afegir? " )
                  preun = float(input ("Amb quin preu? "))
                  fruites[fruitan] = preun
                  imprimir_dict()
             elif opcion == 4:
                  imprimir_dict()
                  fruitae = input ("Quina fruita vols eliminar? ")
                  if fruitae in fruites:
                      fruites.pop(fruitae)
                  else :
                      print("No està a la llista")
                  imprimir_dict()
             opcion = mostrar menu opciones()
```

```
['0.Salir', '1.Quina fruita vols?', '2.Quines fruites tenim', '3.Afegir fruita', '
4.Eliminar fruita']
Opcion: 3
Quina fruita vols vols afegir? kiwi
Amb quin preu? 0.99
platan 1.35
poma 0.8
pera 0.85
taronja 0.7
kiwi 0.99
['0.Salir', '1.Quina fruita vols?', '2.Quines fruites tenim', '3.Afegir fruita', '
4.Eliminar fruita']
Opcion: 4
platan 1.35
poma 0.8
pera 0.85
taronja 0.7
kiwi 0.99
Quina fruita vols eliminar? patata
No està a la llista
platan 1.35
poma 0.8
pera 0.85
taronja 0.7
kiwi 0.99
['0.Salir', '1.Quina fruita vols?', '2.Quines fruites tenim', '3.Afegir fruita', '
4.Eliminar fruita']
Opcion: 4
platan 1.35
poma 0.8
pera 0.85
taronja 0.7
kiwi 0.99
Quina fruita vols eliminar? pera
platan 1.35
poma 0.8
taronja 0.7
kiwi 0.99
['0.Salir', '1.Quina fruita vols?', '2.Quines fruites tenim', '3.Afegir fruita', '
4.Eliminar fruita']
Opcion: 1
Quina fruita vols? poma
el preu de poma és 0.8
['0.Salir', '1.Quina fruita vols?', '2.Quines fruites tenim', '3.Afegir fruita', '
4.Eliminar fruita']
Opcion: 1
Quina fruita vols? kiwi
el preu de kiwi és 0.99
['0.Salir', '1.Quina fruita vols?', '2.Quines fruites tenim', '3.Afegir fruita', '
4.Eliminar fruita']
Opcion: 0
```

```
In [24]:
         # Ejercicio 2 para bucles, Muestra un tablero de ajedrez tomando como base la práct
         from PIL import Image, ImageDraw
         w, h = 802, 802
          img = Image.new("RGB", (w, h))
          dib = ImageDraw.Draw(img)
         for linea in range (8):
                  for i in range (8):
                      col = i*100
                      lin = linea * 100
                      taulell = [(col, lin), (col + 100, lin + 100)]
                      print(taulell)
                      if linea \%2 > 0:
                          if i %2 > 0 :
                              color = 'black'
                          else :
                              color = 'white'
                      else:
                          if i %2 > 0:
                              color = 'white'
                          else:
                              color = 'black'
                      dib.rectangle(taulell, fill = color , outline ="yellow")
          img.show()
```

```
[(0, 0), (100, 100)]
[(100, 0), (200, 100)]
[(200, 0), (300, 100)]
[(300, 0), (400, 100)]
[(400, 0), (500, 100)]
[(500, 0), (600, 100)]
[(600, 0), (700, 100)]
[(700, 0), (800, 100)]
[(0, 100), (100, 200)]
[(100, 100), (200, 200)]
[(200, 100), (300, 200)]
[(300, 100), (400, 200)]
[(400, 100), (500, 200)]
[(500, 100), (600, 200)]
[(600, 100), (700, 200)]
[(700, 100), (800, 200)]
[(0, 200), (100, 300)]
[(100, 200), (200, 300)]
[(200, 200), (300, 300)]
[(300, 200), (400, 300)]
[(400, 200), (500, 300)]
[(500, 200), (600, 300)]
[(600, 200), (700, 300)]
[(700, 200), (800, 300)]
[(0, 300), (100, 400)]
[(100, 300), (200, 400)]
[(200, 300), (300, 400)]
[(300, 300), (400, 400)]
[(400, 300), (500, 400)]
[(500, 300), (600, 400)]
[(600, 300), (700, 400)]
[(700, 300), (800, 400)]
[(0, 400), (100, 500)]
[(100, 400), (200, 500)]
[(200, 400), (300, 500)]
[(300, 400), (400, 500)]
[(400, 400), (500, 500)]
[(500, 400), (600, 500)]
[(600, 400), (700, 500)]
[(700, 400), (800, 500)]
[(0, 500), (100, 600)]
[(100, 500), (200, 600)]
[(200, 500), (300, 600)]
[(300, 500), (400, 600)]
[(400, 500), (500, 600)]
[(500, 500), (600, 600)]
[(600, 500), (700, 600)]
[(700, 500), (800, 600)]
[(0, 600), (100, 700)]
[(100, 600), (200, 700)]
[(200, 600), (300, 700)]
[(300, 600), (400, 700)]
[(400, 600), (500, 700)]
[(500, 600), (600, 700)]
[(600, 600), (700, 700)]
[(700, 600), (800, 700)]
[(0, 700), (100, 800)]
[(100, 700), (200, 800)]
[(200, 700), (300, 800)]
```

```
[(300, 700), (400, 800)]
         [(400, 700), (500, 800)]
         [(500, 700), (600, 800)]
         [(600, 700), (700, 800)]
         [(700, 700), (800, 800)]
In [49]: | # Ejercicio 1 Pide el nombre de una carpeta de imágenes y crea una miniatura de tod
         # Ayuda para obtenir todos los archivos de una carpeta usa os.listdir('dir_path')
         import os, sys
         # Open a file
         path = r'C:\Users\Alumne_mati1\Desktop\Img_pract_bucles'
         dirs = os.listdir( path )
         # This would print all the files and directories
         from PIL import Image, ImageDraw
         dib = ImageDraw.Draw(img)
         for file in dirs:
            nom = path + "/" + file
            im = Image.open(nom)
         #-----per veure les imatges una a u
            if nom == nom:
                nom.open()
                size = (30, 30)
                img.thumbnail(size)
                img.save(r'C:\Users\Alumne_mati1\Desktop\Img_pract_bucles_mini', "JPEG")
                print(filep, nom)
            print(file, nom)
         # img.save(r'C:\Users\Alumne_mati1\Desktop\Img_pract_bucles', "JPEG")
         # size = (128, 128)
         # img.thumbnail(size)
         # img.save(r'C:\Users\Alumne_mati1\Desktop\Img_pract_bucles_mini', "JPEG")
        AttributeError
                                                Traceback (most recent call last)
        Cell In[49], line 20
             18 #-----per veure les imatges
        una a una
             19
                   if nom == nom:
         ---> 20
                       nom.open()
             21
                       size = (30, 30)
                       img.thumbnail(size)
        AttributeError: 'str' object has no attribute 'open'
 In [ ]:
```