# Robert Cyril Plata III  
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# Does everything but insert because Week 1 requirements  
# This Prints the txt file, it can print the list version  
# It can search teams, and search scores I capitalized the first letter of Team Names  
# So I made this program is case sensitive.  
# "Eagles" not "eagles"  
# It can also delete. And it can do it over and over again.  
  
  
# This is my UI  
**def menu(**prompt**):** # prompt is below in the function  
 running **= True** # loop so that way user enters a valid option  
 print**("Enter 1 : Print (text file)")** print**("Enter 2 : Search")** print**("Enter 3 : Insert")** print**("Enter 4 : Delete")** print**("Enter 5 : PrintList (List)")** print**("Enter 6 : Leave")  
 while** running**:** # Will run until turned False  
 userInput **=** input**(**prompt**)  
 if** userInput **== "1":** print**()** userInput **= "Print"** running **= False** # Turned False here and below when proper option is chosen.  
 **elif** userInput **== "2":** userInput **= "Search"** running **= False  
 elif** userInput **== "3":** userInput **= "Insert"** print**()** running **= False  
 elif** userInput **== "4":** userInput **= "Delete"** running **= False  
 elif** userInput **=="5":** userInput **= "PrintList"** running **= False  
 elif** userInput **== "6":** userInput **= "Leave"** running **= False  
 else:** print**()** print**("Sorry,"**, userInput, **"is not an option.")** print**()  
 return** userInput  
  
  
# Function opens the file  
**def openFile(**fileName**):** file **=** open**(**fileName, **"r")** # Reads the file  
 **return** file # Returns the file if needed elsewhere  
  
# Prints List so that way the user can see what the list looks like  
**def printList():** print**()** order **=** 0  
 **for** m **in** range**(**0,len**(**teamName**)):** # prints each line neatly until completion  
 print**(**format**(**teamName**[**m**]**, NAME\_FORMAT**)**, **" "**, format**(**teamWins**[**m**]**, WIN\_FORMAT**)**.strip**()**,**" "**,format**(**teamLoss**[**m**]**, LOSS\_FORMAT**)**.strip**()**,**" "**,**("["+**str**(**order**)+"]")**.strip**())** order **+=** 1  
 print**()** print**("Team /"**, **"Wins /"**, **"Losses /"**, **"index")** print**()**# Prints straight from the text file if the user wants to see what they started with  
**def printFile(**teams**):  
 for** lineOfText **in** teams**:** # Prints each line neatly until completion  
 lineOfText **=** lineOfText.strip**()** teamNames **=** lineOfText**[**START**:**NAME\_LEN**]** record **=** lineOfText**[**NAME\_LEN**:**LOSS\_LEN**]** record **=** record.strip**()** print**(**teamNames**+**format**(""+**record, **'^10s'))** print**()** print**("Printing Successful!")  
  
def searchList(**searchName**):** # Searches the list and returns the parallel equal  
 **for** i **in** range **(**0, len**(**teamName**)):  
 if** teamName**[**i**]**.startswith**(**searchName**):  
 return** i # Returns number  
 **return -**1 # Returns -1 so the rest wont run in Main  
  
# writeToFile (not used yet.)  
**def writeToFile(**fileName**):** file **=** open**(**fileName, **"a")  
 return** file  
  
# Make the screen free of last prompt  
**def clearScreen(**menu**):  
 for** i **in** range**(**0, 40**):** print**()**# Deletes a string in the list  
**def deleteItem(**deleteElement**):  
 for** i **in** range**(**deleteElement, len**(**teamName**)-**1**):** teamName**[**i**] =** teamName**[**i**+**1**]** teamName.pop**()**# Constants  
START **=** 0  
NAME\_LEN **=** 9  
WIN\_LEN **=** 18  
LOSS\_LEN **=** 22  
NAME\_FORMAT **=** str**(**NAME\_LEN**)+"s"**WIN\_FORMAT **=** str**(**WIN\_LEN**)+"s"**LOSS\_FORMAT **=** str**(**LOSS\_LEN**)+"s"**# Defining Lists  
Teams **=** openFile**("TeamsAndRecords.txt")**teamName **= []** # List defining  
teamWins **= []** # List defining  
teamLoss **= []** # List defining  
  
# Defining arrays  
**for** lineOfText **in** Teams**:** name **=** lineOfText**[**START**:**NAME\_LEN**]** # length that i want an array  
 name **=** name.strip**()** # removing unnecessary spaces  
 teamName.append**(**name**)** # Add line to list teamName until completion  
 wins **=** lineOfText**[**NAME\_LEN**:**WIN\_LEN**]** # length i want the second array  
 wins **=** wins.strip**()** # removing unnecessary spaces  
 teamWins.append**(**wins**)** # Add line to list teamWins until completion  
 loss **=** lineOfText**[**WIN\_LEN**:**LOSS\_LEN**]** # length wanted for third array  
 loss **=** loss.strip**()** # removing unnecessary spaces  
 teamLoss.append**(**loss**)** # Add line to list teamLoss until completion  
  
ON **= True  
while** ON**:** Menu **=** menu**("Choose an option.")** # prompt  
  
 # Print function  
 **if** Menu **== "Print":** clearScreen**(**Menu**)** # Clear screen function initiate  
 Teams **=** openFile**("TeamsAndRecords.txt")** # Open File  
 print**(**format**(" Football Teams")**,**)** # Title  
 print**()** print**("Teams Wins Losses")** # Labels  
 print**("------------------------")** # Border  
 printFile**(**Teams**)** # Initiate printFile function  
  
 # Search Function  
 **elif** Menu **== "Search":** askSearch **=** input**("What are you looking for?")** index **=** searchList**(**askSearch**)** # users input is searched  
 **if** index **>=** 0**:** # If the user enters a number less than zero throw exception  
 print**()** print**("Found:"**, teamName**[**index**]**, **"with a record of"**, teamWins**[**index**]**, **"and"**, teamLoss**[**index**])** print**()  
 else:** print**()** print**(**askSearch, **"not found (Remember: This program is case sensitive!)")** print**()** # Insert Function  
 **elif** Menu **== "Insert":** Teams **=** openFile**("TeamsAndRecords.txt")** print**("Work in progress")** print**()** # Delete Function  
 **elif** Menu **== "Delete":** element **=** input**("What team do you want to remove?")** searchDelete **=** searchList**(**element**)  
 if** element **in** teamName**:** deleteItem**(**searchDelete**)** print**(**element, **"deleted")** # Prints the user's new list  
 print**()  
 else:** print**()** print**(**element, **"Not in list")** print**()** # Simple PrintList option  
 **elif** Menu **== "PrintList":** printList**()  
   
 elif** Menu **== "Leave":** # User chooses leave  
 print**()** print**("Final list is:")** printList**()** print**()** print**("G")** print**(" O")** print**(" O")** print**(" D")** print**(" B")** print**(" Y")** print**(" E")** print**(" !!")** ON **= False** # ON is now False program is off.



