

Race Time Sorting in Python

Description:

In this python program you will find the winner among Chevy and Ford.

Taken user input:

Take 8 user input in float type for Chevy and Ford respectively in varitcal format one by one and store them is a list as name of Chevy and Ford.

Check the winner with time difference:

Create a loop and iterate it for 8 times. For each and every iteration check which one took less time and find out the time difference. Print the output with name of Chevy or Ford with time in second for 8 iteration.

For a certain case if the both timing is same then print 'Tie!'

For each iteration of the loop keep track of a counter, how many times Chevy and Ford win.

Finally print the out whose counter is largest with its name as Chevy or Ford.

Source code (Python: 3.6):

```
#!/usr/bin/env python3
## doprofessional order3 of task 1
def winner(Chevy, Ford):
    if(len(Chevy)==8 and len(Ford)==8): # validation check for 8 input for both
        print('And the winners are:')
        c,f=0,0 # winning count initialization

        for j in range(8): # to check the winning for 8 iteration

            if(Chevy[j]>Ford[j]): # checking condition for Ford winning
                print('Ford by',(Chevy[j]*10 - Ford[j]*10)/10,'sec' )
                f+=1 # Ford winning count increment

            elif(Chevy[j]==Ford[j]): print('Tie!') # Tie Condition checking

            else: # checking condition for Chevy winning
                print('Chevy by',(Ford[j]*10 - Chevy[j]*10) / 10,'sec' )
                c+=1

        if(c>f): print('And the winning team is: C H E V E !') # Chevy winning check
        elif(c==f):print('Tie!') # Tie check
        else: print('And the winning team is: F O R D !') # Ford winning check

    else: pass # return nothing just pass the condition.

#----- Taking user input for 8 cars of Chevy and Ford-----
Chevy=[]; Ford=[]
try:
    print('---Input Chevy Times---')
    # takes user input for 8 times
```

```

for i in range(1,8+1): Chevy.append(float(input('Enter time for Chevy Car %d:' %i)))
print('---Input Ford Times---')
for i in range(1,8+1): Ford.append(float(input('Enter time for Ford Car %d:' %i)))
except: print('Invalid Input!!')

winner(Chevy, Ford) # call the function

```

Program and screen output:

```

In [1]: ## Race Time Sorting in Python: task 1
def winner(Chevy, Ford):
    if(len(Chevy)==8 and len(Ford)==8): # validation check for 8 input for both
        print('And the winners are:')
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            elif(Chevy[j]==Ford[j]): print('Tie!') # Tie Condition checking

            else: # checking condition for Chevy winning
                print('Chevy by',(Ford[j]*10 - Chevy[j]*10) / 10,'sec' )
                c+=1

        if(c>f): print('And the winning team is: C H E V E !') # Chevy winning check
        elif(c==f):print('Tie!') # Tie check
        else: print('And the winning team is: F O R D !') # Ford winning check |
        else: pass # return nothing just pass the condition.
#----- Taking user input for 8 cars of Chevy and Ford-----
Chevy=[]; Ford=[]
try:
    print('---Input Chevy Times---')
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    for i in range(1,8+1): Chevy.append(float(input('Enter time for Chevy Car %d:' %i)))
    print('---Input Ford Times---')
    for i in range(1,8+1): Ford.append(float(input('Enter time for Ford Car %d:' %i)))
except: print('Invalid Input!!')
winner(Chevy, Ford) # call the function

```

```

---Input Chevy Times---
Enter time for Chevy Car 1:5.4
Enter time for Chevy Car 2:7.2
Enter time for Chevy Car 3:4.0
Enter time for Chevy Car 4:9.1
Enter time for Chevy Car 5:5.8
Enter time for Chevy Car 6:3.9
Enter time for Chevy Car 7:6.2
Enter time for Chevy Car 8:8.1
---Input Ford Times---
Enter time for Ford Car 1:5.8
Enter time for Ford Car 2:6.9
Enter time for Ford Car 3:3.9
Enter time for Ford Car 4:9.2
Enter time for Ford Car 5:5.8
Enter time for Ford Car 6:3.8
Enter time for Ford Car 7:6.0
Enter time for Ford Car 8:8.5
And the winners are:
Chevy by 0.4 sec
Ford by 0.3 sec
Ford by 0.1 sec
Chevy by 0.1 sec
Tie!
Ford by 0.1 sec
Ford by 0.2 sec
Chevy by 0.4 sec
And the winning team is: F O R D !

```