E. Lazard Emmanuel.Lazard@dauphine.psl.eu

Hello,

I'm an old school computer programmer, so outside C and Python, I don't know much... Here is my brute-force solution in Python. 46656 loop iterations but instantaneous.

```
for winsKF in range(8): # number of wins for Kasparov against Fischer
for drawsKF in range(8-winsKF): # number of draws
  for winsKP in range(8): # wins Kasparov vs. Karpov
    for drawsKP in range(8-winsKP): # draws Kasparov vs. Karpov
      for winsFP in range(8): # wins Fischer vs. Karpov
         for drawsFP in range(8-winsFP): # draws Fischer vs. Karpov
           lossesKF = 7 - winsKF - drawsKF
           lossesKP = 7 - winsKP - drawsKP
           lossesFP = 7 - winsFP - drawsFP
           winsK = winsKF + winsKP # Kasparov number of wins
           winsF = lossesKF + winsFP # Fischer number of wins
           winsP = lossesKP + lossesFP # Karpov number of wins
           drawsK = drawsKF + drawsKP
           drawsF = drawsKF + drawsFP
           drawsP = drawsKP + drawsFP
           lossesK = lossesKF + lossesKP
           lossesF = winsKF + lossesFP
           lossesP = winsKP + winsFP
           pointsK = 2*winsK + drawsK
           pointsF = 2*winsF + drawsF
           pointsP = 2*winsP + drawsP
           if winsK <= winsF or winsK <= winsP:
             continue # Kasparov should have more wins
           if lossesP >= lossesK or lossesP >= lossesF:
             continue # Karpov should have fewer losses
           if pointsF <= pointsK or pointsF <= pointsP:
             continue # Fischer should have more points
           print( "Kasparov vs. Fischer: ", winsKF, "w ", drawsKF, "d ", lossesKF, "l", sep=")
           print( "Kasparov vs. Karpov : ", winsKP, "w ", drawsKP, "d ", lossesKP, "l", sep=")
           print( "Fischer vs. Karpov : ", winsFP, "w ", drawsFP, "d ", lossesFP, "l", sep=")
           print()
```

with output:

Kasparov vs. Fischer: 3w 0d 4l

Kasparov vs. Karpov : 2w 3d 2l Fischer vs. Karpov : 0w 7d 0l

Kasparov vs. Fischer: 3w 0d 4l Kasparov vs. Karpov : 2w 4d 1l Fischer vs. Karpov : 0w 7d 0l

Regards Emmanuel