You have washed a full washing machine of black socks. You assume that no piece is lost and every sock has a pair. Now you should find a pair for each sock, since each pair is a little bit different. How would you describe the process of find a pair for each sock "algorithmically"?  How fast does the pairing go in the best case (and what is the best case like?)

for n in range(socks)

Pick a sock

If it is the pair of one of the previous unpaired socks,

match them together

remove them from matching table

else

put it in a new place on the matching table

stop