

How to send a list through TCP sockets - Python

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I want to send a list through TCP sockets but i can't get the exact list when receiving from the server-side . To be more specific say that i have this list:

```
y=[0,12,6,8,3,2,10]
```



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Then, i send each item of the list like this:



```
for x in y :  
    s.send(str(x))
```

Now the code of server to recieve the data looks like this:

```
while True:  
    data = connection.recv(4096)  
    if data:  
        print('received "%s"' % data)  
    else:  
        print('no more data from', client_address)  
    break
```

The problem is that when i run the program i don't get the same list but something like this:

```
data=[012,6,83,210]
```

Also, everytime i run the program i get a different result for list data

Any ideas what's going wrong with my code ?

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[edited Jun 8 '18 at 14:58](#)

[asked Jul 16 '16 at 15:56](#)



[Moras](#)

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the receiving side. You don't need json in this case as your receiving host is using python.

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```
import pickle
y=[0,12,6,8,3,2,10]
data=pickle.dumps(y)
s.send(data)
```



Use `pickle.loads(recvd_data)` on the receiving side.

Reference: <https://docs.python.org/2/library/pickle.html>

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edited Jul 19 '18 at 10:17

answered Jul 16 '16 at 16:09



shiva

2,019

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1 Did you mean a weird string? If then wait for some time, n I will add a little more explanation or you can read the docs. If you understand pickle and still getting something weird then please describe it. – shiva Jul 16 '16 at 16:29

Yes i get a weird string. I just read the docs you posted , and understood why i need to use pickle. However, i can't really describe that weird thing.. – Moras Jul 16 '16 at 20:24

I used `pickle.loads(connection.recv(4096))` on the receiving side but i get an EOFError. Used try-except but the else statement never gets true – Moras Jul 16 '16 at 20:42

1 Its because data is not received completely on the receiving side. Try putting `connection.recv(4096)` inside a loop and loop till you have received the complete data. – shiva Jul 17 '16 at 0:41

Do you know anything about Reed-Solomon Code ? – Moras Jul 17 '16 at 18:04



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Sorry for my extremely late response, but I hope this can help anyone else who has this problem. This may not be the best solution, but I would convert the list into a string, and encode and send that string. Then, the receiving end can receive, decode, and convert this string back into a list using `eval()`. This would look something like this:



Sender:

```
y = [0,12,6,8,3,2,10]
# Convert To String
y = str(y)
# Encode String
y = y.encode()
# Send Encoded String version of the List
s.send(y)
```

Receiver:

```
# Convert decoded data into list
data = eval(data)
```

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[edited Jul 1 '20 at 15:11](#)

[answered Apr 11 '20 at 14:16](#)



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