Work with TCP/IP channels in Python - Server

The document contains TCP server program in Python. This document operates together with client document tcppy_client.mdd. The server document should be opened and evaluated first. In order to run the Python code, the socket should be installed by using the following command in command window pip install sockets.

We illustrate a simple network application which is based on TCP/IP protocol stack. The network application has two parts, a client part, and a server part. In this document, a code for Python TCP server is given. The server is listening requests from clients at port 12000. The client sends a sentence, which is received by server through connection socket. The server converts the sentence into upper case letters, and sends back the capitalized sentence to client through connection socket. At the end, the connection socket is closed, and server is ready for the next client.

TCP Server

```
#py
from socket import *
serverPort = 12000
serverSocket = socket(AF_INET,SOCK_STREAM)
serverSocket.bind(('127.0.0.1',serverPort))
serverSocket.listen(1)
print('The server is ready to receive')
while True:
     connectionSocket, addr = serverSocket.accept()
     sentence = connectionSocket.recv(1024).decode()
     capitalizedSentence = sentence.upper()
     connectionSocket.send(capitalizedSentence.encode())
     connectionSocket.close()
###
```