

Diff:

Differences between given skeleton and solution

In order to make the sample solution easier to understand, the differences between it and the given skeleton source code were highlighted with the help of the program `diff`.

Legend:

- Gray: unchanged text (only excerpts).
- Green: new lines
- Yellow: changed lines
- Red: deleted lines

Note: Files not listed have not been changed.

This document was created with the help of [diff2html](#) erstellt.

```
diff -u ../course13-communication-with-external-hardware/exercise/code/01_doc_strings.py ../course13-communication-with-external-hardware/exercise/solution/01_doc_strings.py
```

```
../course13-communication-with-external-hardware/exercise/code/01_doc_strings.py      ../course13-communication-with-external-hardware/exercise/solution/01_doc_strings.py
:                                                                                   :
3  """                                                                                   3  """
4                                                                                   4
5                                                                                   5
6  from ipydex import IPS                                                                                   6  funcs = [bin, hex, oct, ord, chr, int]
7                                                                                   7
8  funcs = [] ## ← insert functions here                                                                                   8
9                                                                                   9  for f in funcs:
10                                                                                   10     print(f.__name__)
11 for f in funcs:                                                                                   11     print(f.__doc__)
12                                                                                   12
13     # print name of function:                                                                                   13
14     print(f.__name__)                                                                                   14
15                                                                                   15
16     # print docstring                                                                                   16
17     # ...                                                                                   17
18                                                                                   18
19                                                                                   19
20     # print delimiter                                                                                   20
21     print("-"*10, "\n")                                                                                   21
22                                                                                   22
23                                                                                   23
24 ## optional: try out the function interactively                                                                                   24
25                                                                                   25
26 # IPS()                                                                                   26
```

```
diff -u ../course13-communication-with-external-hardware/exercise/code/02_chat_client.py ../course13-communication-with-external-hardware/exercise/solution/02_chat_client.py
```

```
../course13-communication-with-external-hardware/exercise/code/02_chat_client.py      ../course13-communication-with-external-hardware/exercise/solution/02_chat_client.py
:                                                                                   :
14                                                                                   14
15     # convert unicode string to byte array (with utf8 encoding)                                                                                   15     # convert unicode string to byte array (with utf8 encoding)
16     bin_msg = bytes(msg, "utf8")                                                                                   16     bin_msg = bytes(msg, "utf8")
17     XXX() # send the data                                                                                   17     s.send(bin_msg)
18     print("sent data:", bin_msg)                                                                                   18     print("sent data:", bin_msg)
19                                                                                   19
20 def receive():                                                                                   20 def receive():
21     XXX = XXX(XXX)                                                                                   21     data = s.recv(1024)
22     print("message from server", repr(XXX))                                                                                   22     print("message from server", repr(data))
23                                                                                   23
24 HOST = 'localhost' # The 'remote' host                                                                                   24 HOST = 'localhost' # The 'remote' host
25 PORT = 50007 # The same port as used by the server                                                                                   25 PORT = 50007 # The same port as used by the server
```

```
diff -u ../course13-communication-with-external-hardware/exercise/code/03_light_on.py ../course13-communication-with-external-hardware/exercise/solution/03_light_on.py
```

```
../course13-communication-with-external-hardware/exercise/code/03_light_on.py      ../course13-communication-with-external-hardware/exercise/solution/03_light_on.py
:                                                                                   :
4                                                                                   4
5     # Create instance of the corresponding class (pass interface)                                                                                   5     # Create instance of the corresponding class (pass interface)
6     # port name: e.g. "COM4" on Windows, "/dev/ttyUSB0" on Unix                                                                                   6     # port name: e.g. "COM4" on Windows, "/dev/ttyUSB0" on Unix
7     #AC = ArduinoCommunicator(...)                                                                                   7     #AC = ArduinoCommunicator("COM4")
8                                                                                   8     AC = ArduinoCommunicator("/dev/ttyUSB0")
9                                                                                   9
10                                                                                   10
11 # call the appropriate method (check the source code of the class)                                                                                   11 # call the appropriate method (check the source code of the class)
12 #AC.???                                                                                   12 AC.light_on(30)
13                                                                                   13
14 # start interactive shell                                                                                   14
15 # start interactive shell                                                                                   15
```

```
diff -u ../course13-communication-with-external-hardware/exercise/code/03_robot.py ../course13-communication-with-external-hardware/exercise/solution/03_robot.py
```

