

NAME:SIVARANGINI.Y

ROLL NO:231901051

EXP NO:11D

DATE:18/10/24

REMOTE PROCEDURE CALL FOR SORTING AN ARRAY-XMLRPC

Aim:

To Implement an XML RPC code for sorting array

Code:

Server code:

```
from xmlrpc.server import SimpleXMLRPCServer
def sort_array(arr):
    return sorted(arr)
server = SimpleXMLRPCServer(("localhost", 8000))
print("Listening on port 8000...")
server.register_function(sort_array, "sort_array")
server.serve_forever()
```



```
server.py × client.py
1 from xmlrpc.server import SimpleXMLRPCServer
2 def sort_array(arr): 1 usage
3     return sorted(arr)
4 server = SimpleXMLRPCServer(("localhost", 8000))
5 print("Listening on port 8000...")
6 server.register_function(sort_array, name: "sort_array")
7 server.serve_forever()
```

Client code:

```
import xmlrpc.client
proxy = xmlrpc.client.ServerProxy("http://localhost:8000/")
arr = []
```

```
print("Enter elements to sort (type -1 to end):")
while True:
    element = int(input())
    if element == -1:
        break
    arr.append(element)
sorted_array = proxy.sort_array(arr)
print("Original Array:", arr)
print("Sorted Array:", sorted_array)
```

```
server.py client.py x
1 import xmlrpc.client
2 proxy = xmlrpc.client.ServerProxy("http://localhost:8000/")
3 arr = []
4 print("Enter elements to sort (type -1 to end):")
5 while True:
6     element = int(input())
7     if element == -1:
8         break
9     arr.append(element)
10 sorted_array = proxy.sort_array(arr)
11 print("Original Array:", arr)
12 print("Sorted Array:", sorted_array)
```

Output:

For server :

```
Run XML RPC PROGRAM- SERVER SIDE XML RPC PROGRAM- CLIENT SIDE x
C:\Users\Sivarangini\PycharmProjects\python\.venv\Scripts\python.exe "C:\Users\Sivarangini\PycharmProjects\python\XML RPC PROGRAM- SERVER SIDE.py"
Listening on port 8000...
```

For client:

```
Enter elements to sort (type -1 to end):
```

```
34
```

```
7
```

```
9
```

```
8
```

```
15
```

```
-1
```

```
Original Array: [34, 7, 9, 8, 15]
```

```
Sorted Array: [7, 8, 9, 15, 34]
```

```
Process finished with exit code 0
```

Result:

An array is created and sorted using XMLRPC.