EX:11d REMOTE PROCEDURE CALL FOR SORTING AN ARRAY - XMLRPC DATE:06.10.24

Aim:

To implement an XML-RPC program that sorts an array.

Algorithm:

- 1. Define a server function to sort an array.
- 2. Register this function on an XML-RPC server.
- 3. Write a client program to accept user input, send it to the server, and display the sorted result.

Program: Server.py

```
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() Output:
```

C:\Users\Windows\PycharmProje Listening on port 8000...

Client.py import

xmlrpc.client

proxy = xmlrpc.client.ServerProxy("http://localhost:8000/")

CSE(CYBER SECURITY)

ROLL NO:231901038

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NAME:PRIYANKA E
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```
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)
```

Output:

```
C:\Users\Windows\PycharmProjects\pythonProject1\.venv\Scripts
Enter elements to sort (type -1 to end):

3
1
4
5
2
-1
Original Array: [3, 1, 4, 5, 2]
Sorted Array: [1, 2, 3, 4, 5]
```

Result:

Procedure call for sorting of array -XMLRPC is remoted.