

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

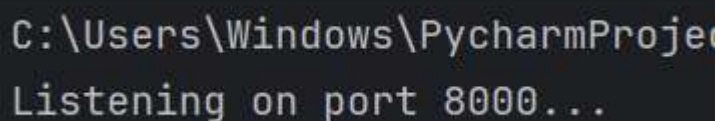
To implement an XML-RPC program that sorts an array.

**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()
```

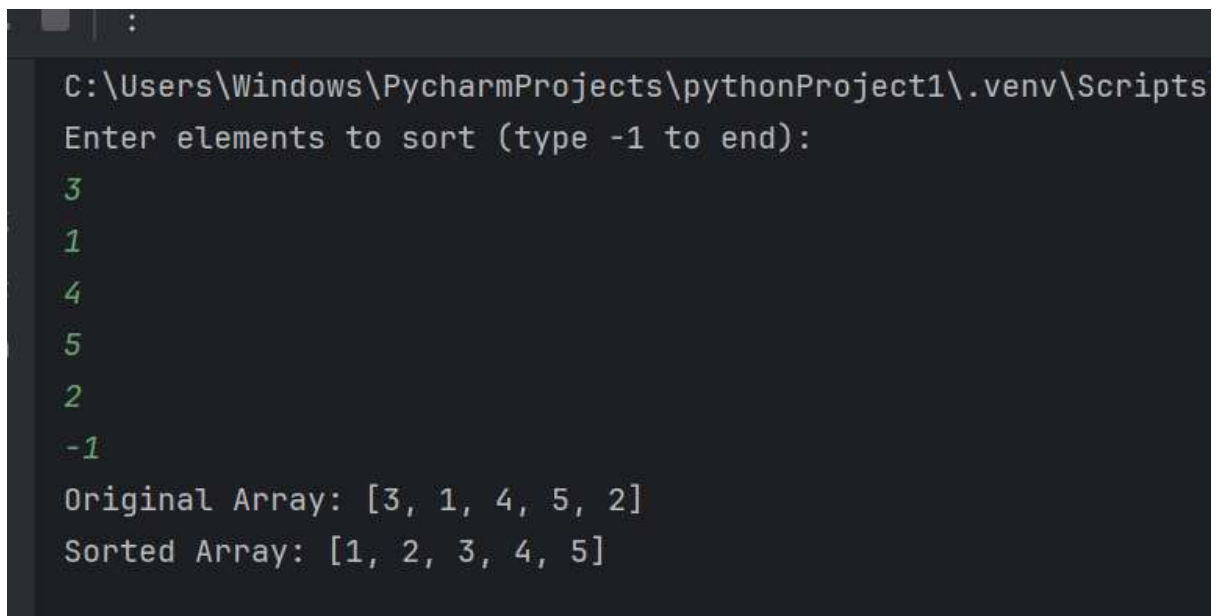
**Output:**

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

**Client.py**

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

```
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 remotod.