Ex No : 11 C **Date :7/11/2024**

REMOTE PROCEDURE CALL FOR LIST OPERATIONS- XMLRPC

AIM:

To Implement an XML RPC code for the following functions, a. No of items in a list

b. Smallest element in a list

c. Largest element in the list

d. Converting a list to a set.

Program

Server Side:

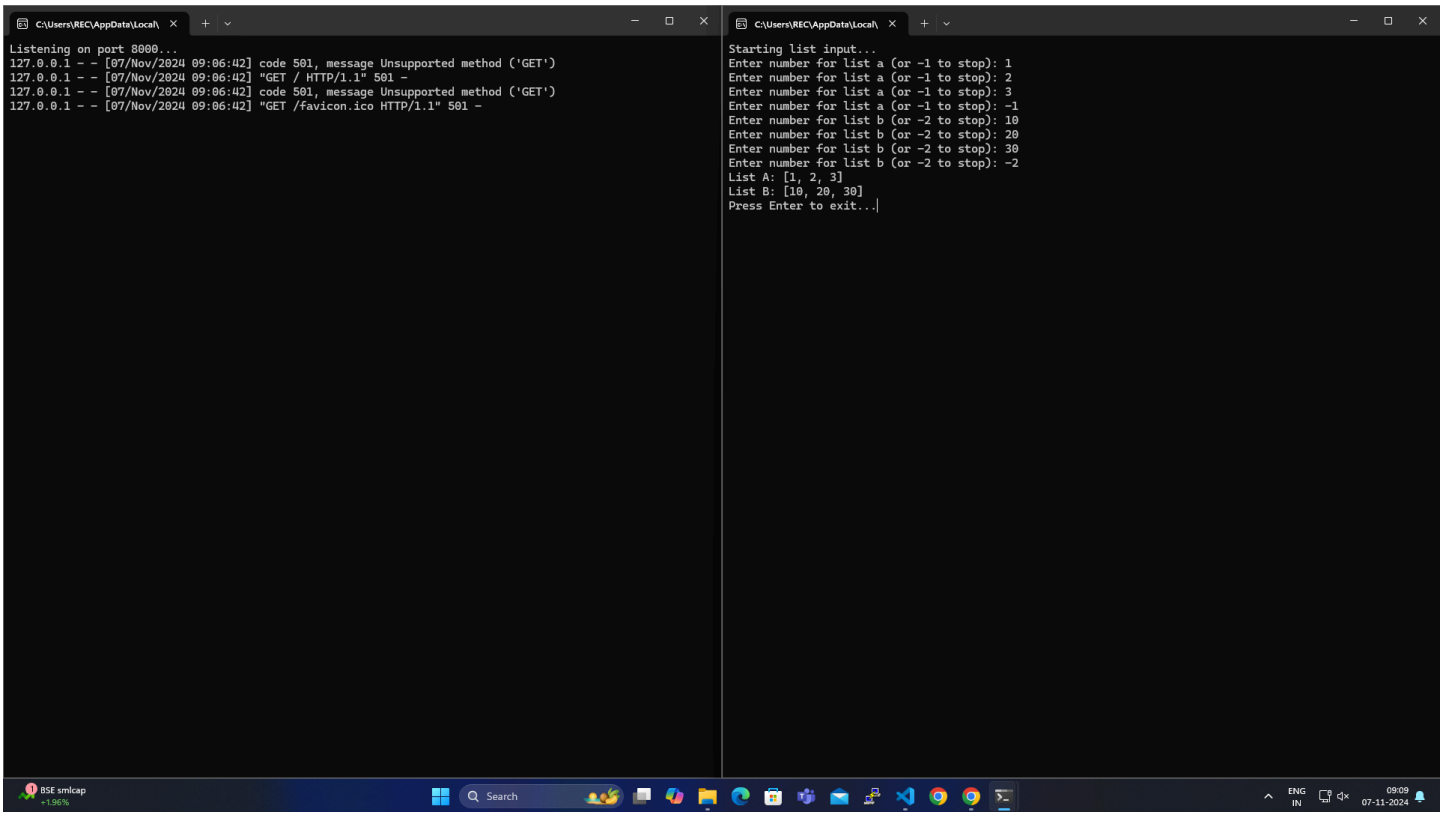
```
from xmlrpc.server import SimpleXMLRPCServer
def list_length(a):
 return len(a)
def list_maximum(a):
 return max(a)
def list_minimum(a):
 return min(a)
def list_to_set(a):
 f=list(set(a))
 return f
def list_concate(a,b):
 return a+b

server = SimpleXMLRPCServer(("localhost", 8000))
print("Listening on port 8000...")
server.register_function(list_length,"list_length")
server.register_function(list_maximum, "list_maximum")
server.register_function(list_minimum, "list_minimum")
server.register_function(list_to_set, "list_to_set")
server.register_function(list_concate, "list_concate")
server.serve_forever()
```

Client Side:

```
import xmlrpc.client
proxy= xmlrpc.client.ServerProxy('http://localhost:8000/')  while
True:
 print("PRESS 1-->STRAT || 2--> STOP ")
 c=int(input("ENTER YOUR CHOICE"))
 a=[]
 b=[]
 if c==1:
 print("ENTER THE ELEMENTS TO ADD FIRST LIST")  print("PRESS -1
TO EXIT THIS LIST")
 while True:
 d=int(input("--->"))
 if d==-1:
 break
 a.append(d)
 print("ENTER THE ELEMENTS TO ADD SECOND LIST")  print("PRESS -2
TO EXIT THIS LIST")
 while True:
 e=int(input("--->"))
 if e==-2:
 break
 b.append(e)
 if c==2:
 break
 print(a)
 print(b)
 print("list_length",proxy.list_length(a))
 print("list_maximum",proxy.list_maximum(a))
print("list_minimum",proxy.list_minimum(a))
print("list_to_set",proxy.list_to_set(a))
 print("list_concate",proxy.list_concate(a,b))
```

Output



Result: Thus , a remote procedure for list procedure is done using XMLRPC