```
Last login: Sun May 11 17:00:15 on ttys018
(base) sathwik@SATHWIKs-MacBook-Air Flower_Main % conda activate flec env
(flec_env) sathwik@SATHWIKs-MacBook-Air Flower_Main % python client4.py
            {\tt DEPRECATED}\ \ {\tt FEATURE:}\ \ {\tt flwr.client.start\_numpy\_client()}\ \ {\tt is}\ \ {\tt deprecated}.
        Instead, use `flwr.client.start_client()` by ensuring you first call the `.to_client()` method as shown below:
        flwr.client.start_client(
                server_address='<IP>:<PORT>
                client=FlowerClient().to_client(), # <-- where FlowerClient is of type flwr.client.NumPyClient object</pre>
        Using `start numpy client()` is deprecated.
            This is a deprecated feature. It will be removed
            entirely in future versions of Flower.
            DEPRECATED FEATURE: flwr.client.start_client() is deprecated.
        Instead, use the `flower-supernode` CLI command to start a SuperNode as shown below:
                $ flower-supernode --insecure --superlink='<IP>:<PORT>'
        To view all available options, run:
                $ flower-supernode --help
        Using `start client()` is deprecated.
            This is a deprecated feature. It will be removed
             entirely in future versions of Flower.
  File "/Users/sathwik/VISUAL STUDIO CODE/FLEC/Flower Main/client4.pv", line 51, in <module>
    fl.client.start_numpy_client(
  File "/Users/sathwik/opt/anaconda3/envs/flec env/lib/python3.9/site-packages/flwr/client/app.py", line 731, in start numpy client
    start client(
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 201, in start_client
    start client internal(
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 438, in start_client_internal
   message = receive()
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/grpc_client/connection.py", line 142, in receive
    proto = next(server_message_iterator)
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/grpc/_channel.py", line 543, in __next__
    return self._next()
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/grpc/_channel.py", line 969, in _next
details = "failed to connect to all addresses; last error: UNKNOWN: ipv4:127.0.0.1:5040: Failed to connect to remote host: connect: Connection refused
 (61)"
debug_error_string = "UNKNOWN: Error received from peer {created_time:"2025-05-11T17:07:09.757302-04:00", grpc_status:14, grpc_message:"failed to connect to all addresses; last error: UNKNOWN: ipv4:127.0.0.1:5040: Failed to connect to remote host: connect: Connection refused (61)"}"
(flec env) sathwik@SATHWIKs-MacBook-Air Flower Main % python client4.py
            DEPRECATED FEATURE: flwr.client.start_numpy_client() is deprecated.
        Instead, use `flwr.client.start_client() by ensuring you first call the `.to_client()` method as shown below:
        flwr.client.start_client(
                server_address='<IP>:<PORT>',
                client=FlowerClient().to client(), # <-- where FlowerClient is of type flwr.client.NumPyClient object
        Using `start numpy client()` is deprecated.
            This is a deprecated feature. It will be removed entirely in future versions of Flower.
WARNING :
            DEPRECATED FEATURE: flwr.client.start_client() is deprecated.
        Instead, use the `flower-supernode` CLI command to start a SuperNode as shown below:
                $ flower-supernode --insecure --superlink='<IP>:<PORT>
        To view all available options, run:
                $ flower-supernode --help
        Using `start client()` is deprecated.
            This is a deprecated feature. It will be removed
            entirely in future versions of Flower.
Traceback (most recent call last):
      "/Users/sathwik/VISUAL STUDIO CODE/FLEC/Flower_Main/client4.py", line 51, in <module>
    fl.client.start numpy client(
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 731, in start_numpy_client
    start_client(
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 201, in start_client
  start_client_internal(
File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 438, in start_client_internal
    message = receive()
  File "/Users/sathwik/opt/anaconda3/envs/flec env/lib/python3.9/site-packages/flwr/client/grpc client/connection.py", line 142, in receive
   proto = next(server_message_iterator)
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/grpc/_channel.py", line 543, in __next__
    return self._next()
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/grpc/_channel.py", line 952, in _next
   raise self
grpc._channel._MultiThreadedRendezvous: <_MultiThreadedRendezvous of RPC that terminated with:</pre>
        status = StatusCode.UNAVAILABLE
        details = "failed to connect to all addresses; last error: UNKNOWN: ipv4:127.0.0.1:5040: Failed to connect to remote host: connect: Connection refused
 (61)"
        debug_error_string = "UNKNOWN: Error received from peer {grpc_message: "failed to connect to all addresses; last error: UNKNOWN: ipv4:127.0.0.1:5040: F
ailed to connect to remote host: connect: Connection refused (61)", grpc_status:14, created_time:"2025-05-11T17:13:31.279913-04:00"}'
(flec env) sathwik@SATHWIKs-MacBook-Air Flower Main % python client4.py
        G : DEPRECATED FEATURE: flwr.client.start_numpy_client() is deprecated.
Instead, use `flwr.client.start_client()` by ensuring you first call the `.to_client()` method as shown below:
        flwr.client.start_client(
                server_address='<IP>:<PORT>'
                client=FlowerClient().to_client(), # <-- where FlowerClient is of type flwr.client.NumPyClient object</pre>
```

```
Using `start_numpy_client()` is deprecated.
             This is a deprecated feature. It will be removed
             entirely in future versions of Flower.
            DEPRECATED FEATURE: flwr.client.start client() is deprecated.
WARNING:
         Instead, use the `flower-supernode` CLI command to start a SuperNode as shown below:
                 $ flower-supernode --insecure --superlink='<IP>:<PORT>'
         To view all available options, run:
                 $ flower-supernode --help
        Using `start client()` is deprecated.
             This is a deprecated feature. It will be removed entirely in future versions of Flower.
Traceback (most recent call last):
File "/Users/sathwik/VISUAL STUDIO CODE/FLEC/Flower Main/client4.py", line 51, in <module>
    fl.client.start_numpy_client(
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 731, in start_numpy_client
    start_client(
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 201, in start_client
    start client internal(
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 438, in start_client_internal
    message = receive()
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/grpc_client/connection.py", line 142, in receive
    proto = next(server_message_iterator)
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/grpc/_channel.py", line 543, in __next__
    return self._next()
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/grpc/_channel.py", line 969, in _next
grpc._channel._MultiThreadedRendezvous: <_MultiThreadedRendezvous of RPC that terminated with:
    status = StatusCode.UNAVAILABLE</pre>
         details = "failed to connect to all addresses; last error: UNKNOWN: ipv4:127.0.0.1:5040: Failed to connect to remote host: connect: Connection refused
 (61)"
debug_error_string = "UNKNOWN:Error received from peer {grpc_message:"failed to connect to all addresses; last error: UNKNOWN: ipv4:127.0.0.1:5040: F ailed to connect to remote host: connect: Connection refused (61)", grpc_status:14, created_time:"2025-05-11T17:15:43.63563-04:00"}"
(flec env) sathwik@SATHWIKs-MacBook-Air Flower Main % python client4.pv
         : DEPRECATED FEATURE: flwr.client.start_numpy_client() is deprecated.
Instead, use `flwr.client.start_client()` by ensuring you first call the `.to_client()` method as shown below:
         flwr.client.start_client(
                  server_address='<IP>:<PORT>'
                  client=FlowerClient().to client(), # <-- where FlowerClient is of type flwr.client.NumPvClient object
        Using `start numpy client()` is deprecated.
             This is a deprecated feature. It will be removed
             entirely in future versions of Flower.
WARNING :
         : DEPRECATED FEATURE: flwr.client.start_client() is deprecated.

Instead, use the `flower-supernode` CLI command to start a SuperNode as shown below:
                  $ flower-supernode --insecure --superlink='<IP>:<PORT>'
         To view all available options, run:
                 $ flower-supernode --help
        Using `start client()` is deprecated.
             This is a deprecated feature. It will be removed
             entirely in future versions of Flower.
Traceback (most recent call last):
  File "/Users/sathwik/VISUAL STUDIO CODE/FLEC/Flower_Main/client4.py", line 51, in <module>
    fl.client.start numpy client(
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 731, in start_numpy_client
    start client(
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 201, in start_client
  start_client_internal(
File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 438, in start_client_internal
    message = receive()
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/grpc_client/connection.py", line 142, in receive
    proto = next(server_message_iterator)
  File \ "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/grpc/\_channel.py", \ line \ 543, \ in \ \_\_next\_libers.
    return self. next()
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/grpc/_channel.py", line 969, in _next
    raise self
grpc._channel._MultiThreadedRendezvous: <_MultiThreadedRendezvous of RPC that terminated with:
         status = StatusCode.UNAVAILABLE
         details = "failed to connect to all addresses: last error: UNKNOWN: ipv4:127.0.0.1:5040: Failed to connect to remote host: connect: Connection refused
 (61)"
         debug_error_string = "UNKNOWN:Error received from peer {created_time:"2025-05-11T17:23:18.805051-04:00", grpc_status:14, grpc_message:"failed to conn
ect to all addresses; last error: UNKNOWN: ipv4:127.0.0.1:5040: Failed to connect to remote host: connect: Connection refused (61) )
(flec_env) sathwik@SATHWIKs-MacBook-Air Flower_Main % python client4.py
         : DEPRECATED FEATURE: flwr.client.start_numpy_client() is deprecated.
Instead, use `flwr.client.start_client()` by ensuring you first call the `.to_client()` method as shown below:
         client=FlowerClient().to_client(), # <-- where FlowerClient is of type flwr.client.NumPyClient object</pre>
         Using `start_numpy_client()` is deprecated.
             This is a deprecated feature. It will be removed
             entirely in future versions of Flower.
WARNING: DEPRECATED FEATURE: flwr.client.start client() is deprecated.
```

```
Instead, use the `flower-supernode` CLI command to start a SuperNode as shown below:
                 $ flower-supernode --insecure --superlink='<IP>:<PORT>'
        To view all available options, run:
                $ flower-supernode --help
       Using `start client()` is deprecated.
            This is a deprecated feature. It will be removed
            entirely in future versions of Flower.
Traceback (most recent call last):
  File "/Users/sathwik/VISUAL STUDIO CODE/FLEC/Flower_Main/client4.py", line 51, in <module>
  fl.client.start_numpy_client(
File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 731, in start_numpy_client
    start_client(
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 201, in start_client
  start_client_internal(
File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/app.py", line 438, in start_client_internal
    message = receive()
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/flwr/client/grpc_client/connection.py", line 142, in receive
   proto = next(server_message_iterator)
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/grpc/_channel.py", line 543, in __next__
    return self._next()
  File "/Users/sathwik/opt/anaconda3/envs/flec_env/lib/python3.9/site-packages/grpc/_channel.py", line 969, in _next
   raise self
status = StatusCode.UNAVAILABLE
        details = "Cancelling all calls"

debug_error_string = "UNKNOWN:Error received from peer {grpc_message:"Cancelling all calls", grpc_status:14, created_time:"2025-05-11T17:26:58.996123
-04:00"}
(flec env) sathwik@SATHWIKs-MacBook-Air Flower Main % python client4.py
        : DEPRECATED FEATURE: flwr.client.start_numpy_client() is deprecated.

Instead, use `flwr.client.start_client()` by ensuring you first call the `.to_client()` method as shown below: flwr.client.start_client()`
                server_address='<IP>:<PORT>',
client=FlowerClient().to_client(), # <-- where FlowerClient is of type flwr.client.NumPyClient object</pre>
        Using `start numpy client()` is deprecated.
            This is a deprecated feature. It will be removed
            entirely in future versions of Flower.
WARNING :
            DEPRECATED FEATURE: flwr.client.start_client() is deprecated.
        Instead, use the 'flower-supernode' CLI command to start a SuperNode as shown below:
                 $ flower-supernode --insecure --superlink='<IP>:<PORT>'
        To view all available options, run:
                $ flower-supernode --help
        Using `start client()` is deprecated.
            This is a deprecated feature. It will be removed
            entirely in future versions of Flower.
INFO :
INFO:
            Received: train message 8a237cdd-3f9b-4a36-842f-81df1a957975
Training finished for round 1
            Sent reply
INFO:
            Received: train message e60eea08-d41d-41cc-9b61-7d328d0264ba
Training finished for round 2
            Sent reply
INFO:
TNFO :
            Received: train message 3fde8266-c2df-4849-9fb2-489088b543b2
INFO:
Training finished for round 3
INFO:
            Sent reply
INFO:
TNFO :
            Received: train message ba8dc11d-30b7-40ce-a34d-fba9b392255a
Training finished for round 4
            Sent reply
INFO:
INFO:
            Received: train message b3ed16ed-d558-4e78-8b51-0daf52d4cf73
Training finished for round 5
            Sent reply
INFO:
            Received: train message dee9f1d0-7376-4e0a-87ed-dd4e9b53b674
Training finished for round 6
INFO:
            Sent reply
INFO:
INFO:
            Received: train message 16037cdf-ac94-45ff-b66f-8671697a652b
Training finished for round 7
TNFO:
            Sent reply
INFO:
INFO: Received: train message 3b47394a-4e4d-4387-b04e-b3e3b7a45ab1 Training finished for round 8
            Sent reply
INFO :
INFO:
INFO
            Received: train message 2ae356d3-72b5-4c86-8df3-6207b16b5249
Training finished for round 9
            Sent reply
INFO:
INFO:
            Received: train message 96484eea-f0f6-4a01-a2d6-0b12f7f5d14b
INFO:
Training finished for round 10
INFO:
            Sent reply
INFO :
            Received: reconnect message 175be979-b84b-473f-a15d-8f8a4119e4a8 Disconnect and shut down
INFO:
(flec_env) sathwik@SATHWIKs-MacBook-Air Flower_Main %
```