======Client======

ryanpan@RyanPanPC $ python3 main\_client.py

add: Add a student's name and score

show: Print all

exit: Exit

Please select: show

The client sent data => {'command': 'show', 'parameters': {}}

The client received data => {'status': 'OK', 'parameters': []}

==== student list ====

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add: Add a student's name and score

show: Print all

exit: Exit

Please select: add

Please input a student's name: Bill

Please input a subject name or exit for ending: English

Please input Bill's English score or < 0 for discarding the subject: 99

Please input a subject name or exit for ending: Chinese

Please input Bill's Chinese score or < 0 for discarding the subject: 60

Please input a subject name or exit for ending: exit

The client sent data => {'command': 'add', 'parameters': {'name': 'Bill', 'scores': {'English': 99.0, 'Chinese': 60.0}}}

The client received data => {'status': 'OK'}

Add {'name': 'Bill', 'scores': {'English': 99.0, 'Chinese': 60.0}} success

add: Add a student's name and score

show: Print all

exit: Exit

Please select: show

The client sent data => {'command': 'show', 'parameters': {}}

The client received data => {'status': 'OK', 'parameters': [{'name': 'Bill', 'scores': {'English': 99.0, 'Chinese': 60.0}}]}

==== student list ====

Name: Bill

subject: English, score: 99.0

subject: Chinese, score: 60.0

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add: Add a student's name and score

show: Print all

exit: Exit

Please select: add

Please input a student's name: John

Please input a subject name or exit for ending: Math

Please input John's Math score or < 0 for discarding the subject: 80

Please input a subject name or exit for ending: exit

The client sent data => {'command': 'add', 'parameters': {'name': 'John', 'scores': {'Math': 80.0}}}

The client received data => {'status': 'OK'}

Add {'name': 'John', 'scores': {'Math': 80.0}} success

add: Add a student's name and score

show: Print all

exit: Exit

Please select: show

The client sent data => {'command': 'show', 'parameters': {}}

The client received data => {'status': 'OK', 'parameters': [{'name': 'Bill', 'scores': {'English': 99.0, 'Chinese': 60.0}}, {'name': 'John', 'scores': {'Math': 80.0}}]}

==== student list ====

Name: Bill

subject: English, score: 99.0

subject: Chinese, score: 60.0

Name: John

subject: Math, score: 80.0

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add: Add a student's name and score

show: Print all

exit: Exit

Please select: add

Please input a student's name: John

Please input a subject name or exit for ending: English

Please input John's English score or < 0 for discarding the subject: 90

Please input a subject name or exit for ending: exit

The client sent data => {'command': 'add', 'parameters': {'name': 'John', 'scores': {'English': 90.0}}}

The client received data => {'status': 'Fail', 'reason': 'The name already exists.'}

Add {'name': 'John', 'scores': {'English': 90.0}} fail

add: Add a student's name and score

show: Print all

exit: Exit

Please select: show

The client sent data => {'command': 'show', 'parameters': {}}

The client received data => {'status': 'OK', 'parameters': [{'name': 'Bill', 'scores': {'English': 99.0, 'Chinese': 60.0}}, {'name': 'John', 'scores': {'Math': 80.0}}]}

==== student list ====

Name: Bill

subject: English, score: 99.0

subject: Chinese, score: 60.0

Name: John

subject: Math, score: 80.0

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add: Add a student's name and score

show: Print all

exit: Exit

Please select: exit

ryanpan@RyanPanPC $ python3 main\_client.py

add: Add a student's name and score

show: Print all

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Please select: show

The client sent data => {'command': 'show', 'parameters': {}}

The client received data => {'status': 'OK', 'parameters': [{'name': 'Bill', 'scores': {'English': 99.0, 'Chinese': 60.0}}, {'name': 'John', 'scores': {'Math': 80.0}}]}

==== student list ====

Name: Bill

subject: English, score: 99.0

subject: Chinese, score: 60.0

Name: John

subject: Math, score: 80.0

======================

add: Add a student's name and score

show: Print all

exit: Exit

Please select: exit

======Server======

ryanpan@RyanPanPC $ python3 main\_server.py

('127.0.0.1', 50927) connected

{"command": "show", "parameters": {}}

server received: {'command': 'show', 'parameters': {}} from ('127.0.0.1', 50927)

{"command": "add", "parameters": {"name": "Bill", "scores": {"English": 99.0, "Chinese": 60.0}}}

server received: {'command': 'add', 'parameters': {'name': 'Bill', 'scores': {'English': 99.0, 'Chinese': 60.0}}} from ('127.0.0.1', 50927)

{"command": "show", "parameters": {}}

server received: {'command': 'show', 'parameters': {}} from ('127.0.0.1', 50927)

{"command": "add", "parameters": {"name": "John", "scores": {"Math": 80.0}}}

server received: {'command': 'add', 'parameters': {'name': 'John', 'scores': {'Math': 80.0}}} from ('127.0.0.1', 50927)

{"command": "show", "parameters": {}}

server received: {'command': 'show', 'parameters': {}} from ('127.0.0.1', 50927)

{"command": "add", "parameters": {"name": "John", "scores": {"English": 90.0}}}

server received: {'command': 'add', 'parameters': {'name': 'John', 'scores': {'English': 90.0}}} from ('127.0.0.1', 50927)

{"command": "show", "parameters": {}}

server received: {'command': 'show', 'parameters': {}} from ('127.0.0.1', 50927)

('127.0.0.1', 50927) close connection

finish

leaving .......

ryanpan@RyanPanPC $ python3 main\_server.py

('127.0.0.1', 50943) connected

{"command": "show", "parameters": {}}

server received: {'command': 'show', 'parameters': {}} from ('127.0.0.1', 50943)

('127.0.0.1', 50943) close connection

finish

leaving .......