# Question 1

## Part 2

Assume that there are 3 connected clients initially.

Let the weather information at the WCP after the latest weather update be .

Let the weather information at connected client 1 be .

Let the weather information at connected client 2 be .

Let the weather information at connected client 3 be .

Let the weather information at connected client i be .

Then, the LTL property is:

## Part 3

describe the counter example you get from SPIN and explain how it can violate the property. Include the screenshot of the counter example (e.g. message sequence chart) in the report.

No message is sent to client in some cases? Client blocks on receive

Property can be “every receive should eventually get a response from the corresponding send”?

## Part 4

explain the deadlock free implementation with proof.

Send NACK or add timeout and disconnect?

# Question 2

## Part 2

explain the sequence of events.