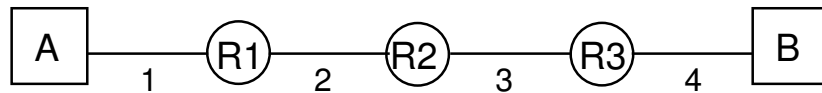


# ITS323 – Quiz 6

Name: \_\_\_\_\_ ID: \_\_\_\_\_ Marks: \_\_\_\_\_ (4)

## Question 1 [4 marks]

Consider the internet below where source A is sending 12KB of data to destination B. The 4 subnets are numbered. The maximum packet size that is allowed by each subnet link layer is: 2000B (subnet 1); 4000B (subnet 2); 4000B (subnet 3); 1000B (subnet 4). There are 3 possible fragmentation schemes: fragmentation and re-assembly at any node; fragmentation only at the source, re-assembly only at the destination; or fragmentation at any node, re-assembly only at the destination. Assume the 2nd scheme is being used. You can ignore the size of headers in the following questions.



- What is the maximum size of each packet sent across the 2nd subnet? [2 marks]
- What is an advantage of this fragmentation/re-assembly scheme (compared to the 1st scheme)? [1 mark]
- What is a disadvantage? [1 mark]