Q1

hey from message1

1

Explanation: @Bean annotation stored method getmessage1 in springboot container, then executed the method and printed "hey from message1" and the returned value which is "1".

Q2

hey from message1

hey from message2

1

Explanation: printed "hey from message1" and stored the return value in the container, then passed the returned value in getmessage2 parameter data, then second method got executed and printed "hey from message2" and the return value "1"

Q3

hey from message1

hey from message3

Explanation: method getmessage1 will print but it won't send the returned value to getmessage2 since its qualifier is "1" so will check method getmessage3 and its qualifier is "3" so it'll print the message and it won't reach method getmessage2 since getmessage3 is a line bellow getmessage2

Q4

hey from message1

hey from Main controller

hey from message3

Explanation: print getmessage1 then pass returned value to constructer MainController and print message MainController then skip getmessage2 since it has no qualifier then print getmessage3 and it won't pass any returned value to getmessage2.

Unpredictable output since no object of MainController is going to be passed to getmessage1.