<p align="center">**Exercise(Spring Contianer)**</p>

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Question1

The output is: hey from message1

And in the container will store string "1"

Question2

The output is:

 hey from message1

hey from message2

Because we use the Qualifier keyword, the getMessage1() method will be executed first, then the String value will be sent to the getMessage2() method that receives the String then executed.

in the container will store String "1" and String data that is equal to "1"

Question3

First Possibility

The output is:

hey from message1

hey from message3

hey from message2

Justification

 The getMessage1() and getMessage3() methods do not have any arguments to receive, so they can be executed first, let's say the getMessage1() method is executed first, then the third method is executed, and finally the getMessage2() method is executed because it depends on the getMessage3() method is executed first due to the Qualifier keyword.

getMessage3() method will send String"3" to getMessage2() method that take the String and return it .

in the container will store String "1","3", and data String that equal to "3".

Second Possibility

If the getMessage3() method is executed first, it will send the String "3" to the getMessage2() method, and thus getMessage1() and getMessage2() will be the same priority to execute, let's say getMessage2() execute before getMessage1() the output will be

The output is:

hey from message3

hey from message2

hey from message1

in the container will store String "1","3", and data String that equal to "3".

Third Possibility

If the getMessage3() method is executed first, then getMessage1() execute before getMessage2() the output will be

hey from message3

hey from message1

hey from message2

in the container will store String "1","3", and data String that equal to "3".

Question4

Executing getMessage1() or getMessage3() have the same probability

Because neither of them has variables to receive them (Arguments)

First Possibility

If getMessage1() is executed first, then getMessage3() and MainController will have the same priority, because getMessage1() will send a String to MainController, and let's assume MainController is executed first, it will receive the String "1" and store it in the data String variable then execute the print statement.

after that getMessage3() will perform and execute the print statement then send String "3" to the getMessage2() method that receives the string executes the print statement and stores the data String in the container.

This will be the output

hey from message1

hey from Main Controller

hey from message3

hey from message2

Of course, getMessage2() will not be executed before getMessage3() because of the Qualifier keyword.

Second Possibility

If getMessage1() is executed first, then getMessage3() and MainController will have the same priority, let's assume getMessage3() is executed first

,getMessage2() and MainController will have the same priority so let's assume getMessage2() is executed first. The output will be

hey from message1

hey from message3

hey from message2

hey from Main Controller

OR ## Third Possibility

 hey from message1

hey from message3

hey from Main Controller

hey from message2

Fourth Possibility

hey from message3

hey from message1

hey from Main Controller

hey from message2

Fifth Possibility

hey from message3

hey from message2

hey from message1

hey from Main Controller

Sexed Possibility

hey from message3

hey from message1

hey from message2

hey from Main Controller

Question5

Output is:

hey from message3

hey from message2

hey from Main Controller

hey from message1