Q1:

The output:

Explanation:

There is only one Bean and no dependence.

Hey from message1

Q2:

The output:

Hey from message1

Hey from message2

Explanation:

getMessage2 depends on the output of getMessage1(through @Qualifier ("1").

Q3:

The output:

| 0 | Hey from message1 |
|---|-------------------|
| | Hey from message3 |
| | Hey from message2 |
| 2 | Hey from message3 |
| | Hey from message2 |
| | Hey from message1 |

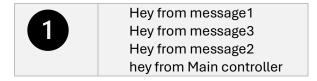
Explanation:

getMessage1 and getMessage3 do not depend on any other method, so either getMessage1 or getMessage3 can be executed first.

getMessage2 depends on the output of getMessage3, Therefore getMessage2 will not execute unless getMessage3 has executed first.

Q4:

The output:



| | Hey from message3 |
|----------|--------------------------|
| 2 | Hey from message1 |
| | Hey from message2 |
| | hey from Main controller |
| | Hey from message1 |
| 3 | Hey from message3 |
| | hey from Main controller |
| | Hey from message2 |
| | Hey from message3 |
| 4. | Hey from message1 |
| | hey from Main controller |
| | Hey from message2 |

Explanation:

getMessage1 and getMessage3 do not depend on any other method, so either getMessage1 or getMessage3 can be executed first.

getMessage2 depends on the output of getMessage3, therefore getMessage2 will not execute unless getMessage3 has executed first

MainController depends on getMessage1, so MainControllerwill not execute until getMessage1 has executed.

Q5:

The output:

Hey from message3

Hey from message2

hey from Main controller

Hey from message1

Explanation:

getMessage3 does not depend on any other method, so it will execute first.

getMessage2 depends on the output of getMessage3, therefore getMessage2 will not execute unless getMessage3 has executed first

MainController depends on getMessage2, so MainControllerwill not execute until getMessage2 has executed.