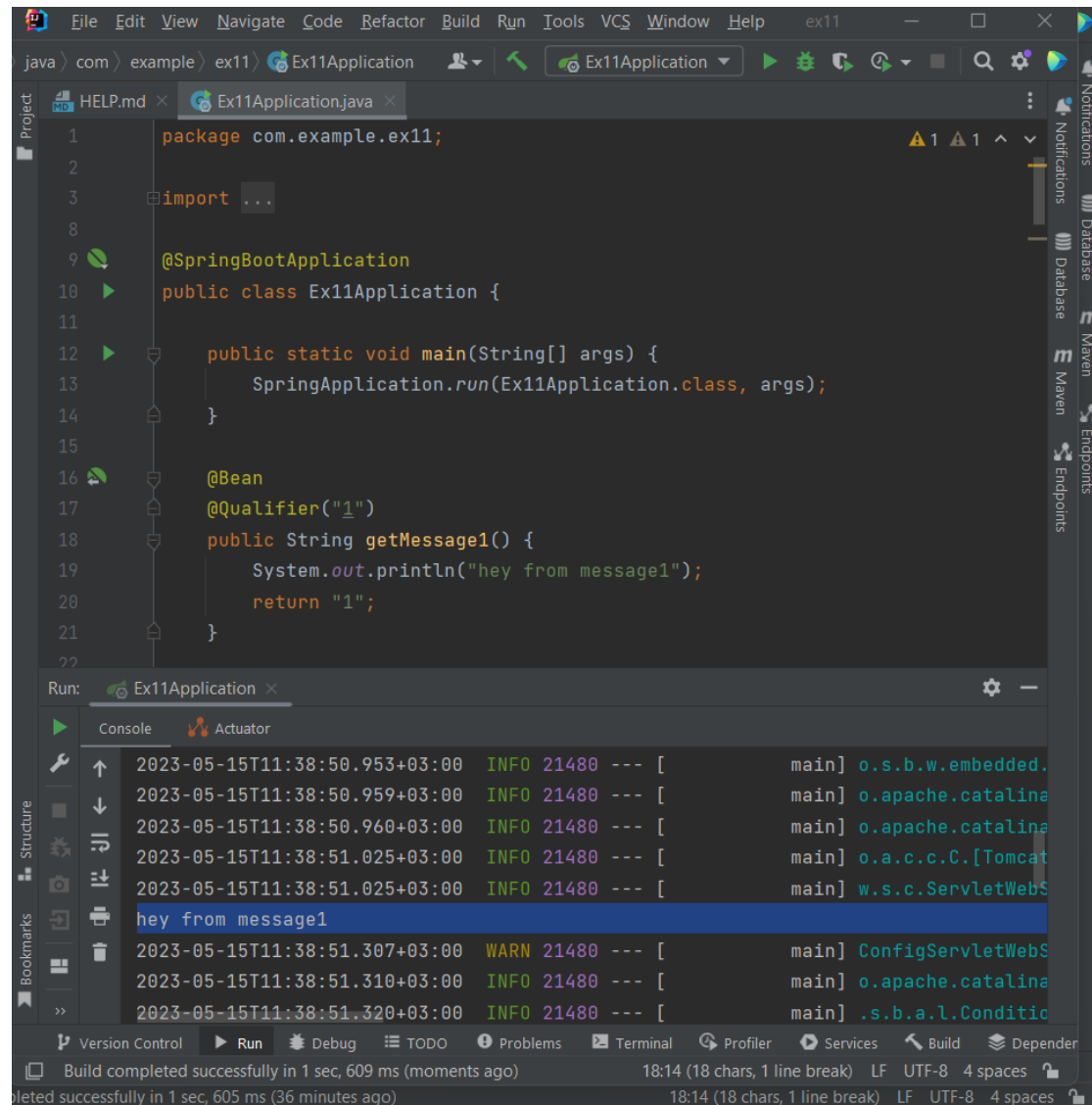


Hw11

Q1: output

hey from message1



The screenshot displays an IDE window for a Java project named 'ex11'. The main editor shows the source code of 'Ex11Application.java'. The code is as follows:

```
1 package com.example.ex11;
2
3 import ...
4
5 @SpringBootApplication
6 public class Ex11Application {
7
8     public static void main(String[] args) {
9         SpringApplication.run(Ex11Application.class, args);
10    }
11
12    @Bean
13    @Qualifier("1")
14    public String getMessage1() {
15        System.out.println("hey from message1");
16        return "1";
17    }
18 }
```

Below the editor, the 'Run' tab is active, showing the console output. The output consists of several log messages from the application's startup, followed by the message 'hey from message1' which is highlighted in blue. The messages are as follows:

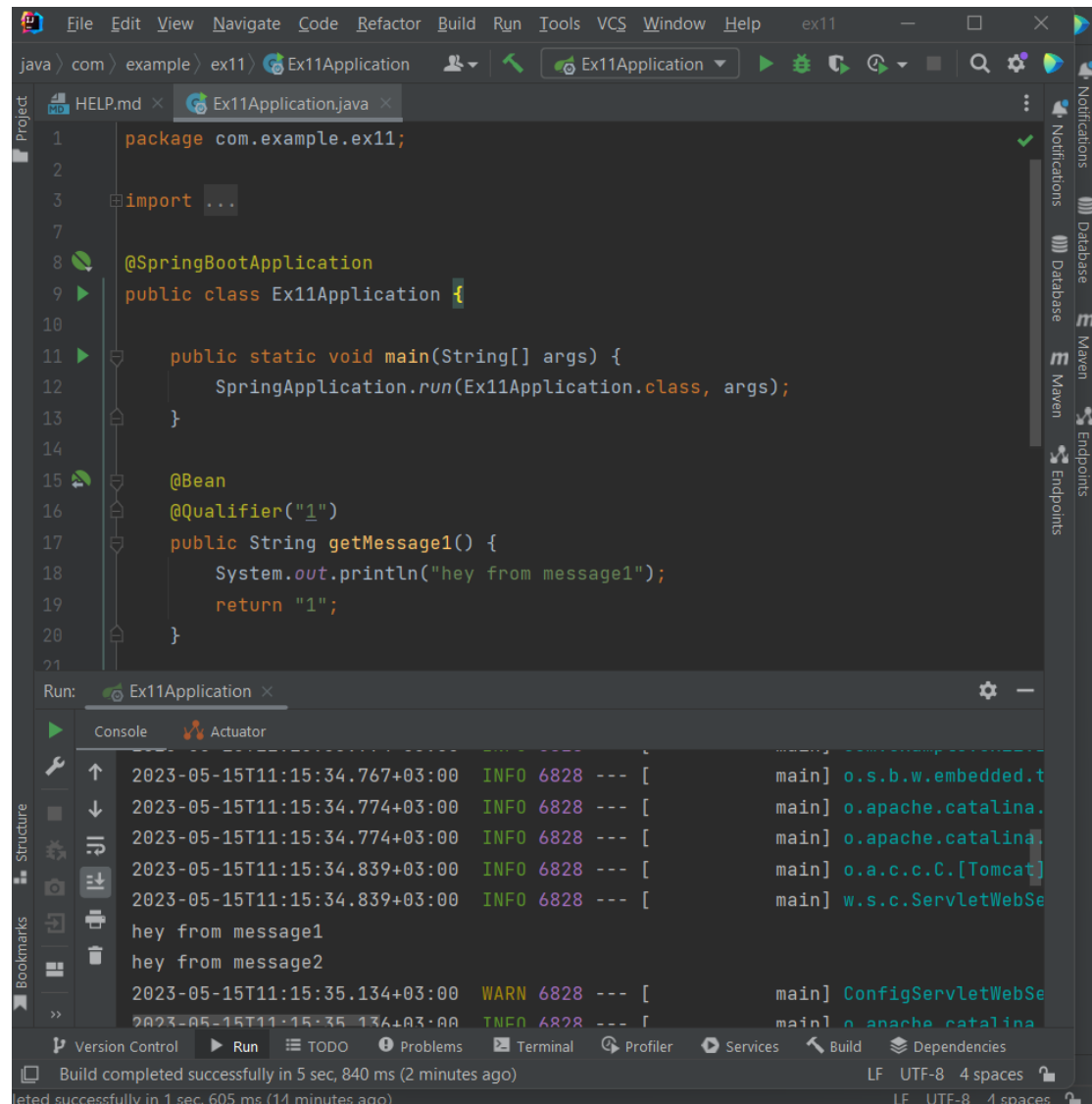
```
2023-05-15T11:38:50.953+03:00 INFO 21480 --- [main] o.s.b.w.embedded.
2023-05-15T11:38:50.959+03:00 INFO 21480 --- [main] o.apache.catalina
2023-05-15T11:38:50.960+03:00 INFO 21480 --- [main] o.apache.catalina
2023-05-15T11:38:51.025+03:00 INFO 21480 --- [main] o.a.c.c.C.[Tomcat
2023-05-15T11:38:51.025+03:00 INFO 21480 --- [main] w.s.c.ServletWebS
hey from message1
2023-05-15T11:38:51.307+03:00 WARN 21480 --- [main] ConfigServletWebS
2023-05-15T11:38:51.310+03:00 INFO 21480 --- [main] o.apache.catalina
2023-05-15T11:38:51.320+03:00 INFO 21480 --- [main] .s.b.a.l.Conditic
```

The bottom status bar indicates that the build completed successfully in 1 second, 609 ms (moments ago).

Q2: output

hey from message1

hey from message2



The screenshot shows an IDE window with a Java file named `Ex11Application.java` and a console window below it. The Java code is as follows:

```
1 package com.example.ex11;
2
3 import ...
4
5 @SpringBootApplication
6 public class Ex11Application {
7
8     public static void main(String[] args) {
9         SpringApplication.run(Ex11Application.class, args);
10    }
11
12    @Bean
13    @Qualifier("1")
14    public String getMessage1() {
15        System.out.println("hey from message1");
16        return "1";
17    }
18 }
```

The console window shows the following output:

```
2023-05-15T11:15:34.767+03:00 INFO 6828 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s) 8080 (http)
2023-05-15T11:15:34.774+03:00 INFO 6828 --- [main] o.apache.catalina.core.StandardEngine : Starting Servlet engine: o.apache.catalina.core.StandardEngine
2023-05-15T11:15:34.774+03:00 INFO 6828 --- [main] o.apache.catalina.core.StandardEngine : Starting Servlet engine: o.apache.catalina.core.StandardEngine
2023-05-15T11:15:34.839+03:00 INFO 6828 --- [main] o.a.c.c.C.[Tomcat].ajp.AjpEndpoint : ajp.org.apache.catalina.connector.AjpEndpoint@6b0b1d3d
2023-05-15T11:15:34.839+03:00 INFO 6828 --- [main] w.s.c.ServletWebServerInitializer : Using default port(s) 8080 (http) for context path /
hey from message1
hey from message2
2023-05-15T11:15:35.134+03:00 WARN 6828 --- [main] ConfigServletWebServerFactory : Error starting Tomcat. Falling back to start using Java 1.6 class library
2023-05-15T11:15:35.134+03:00 INFO 6828 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s) 8080 (http)
```

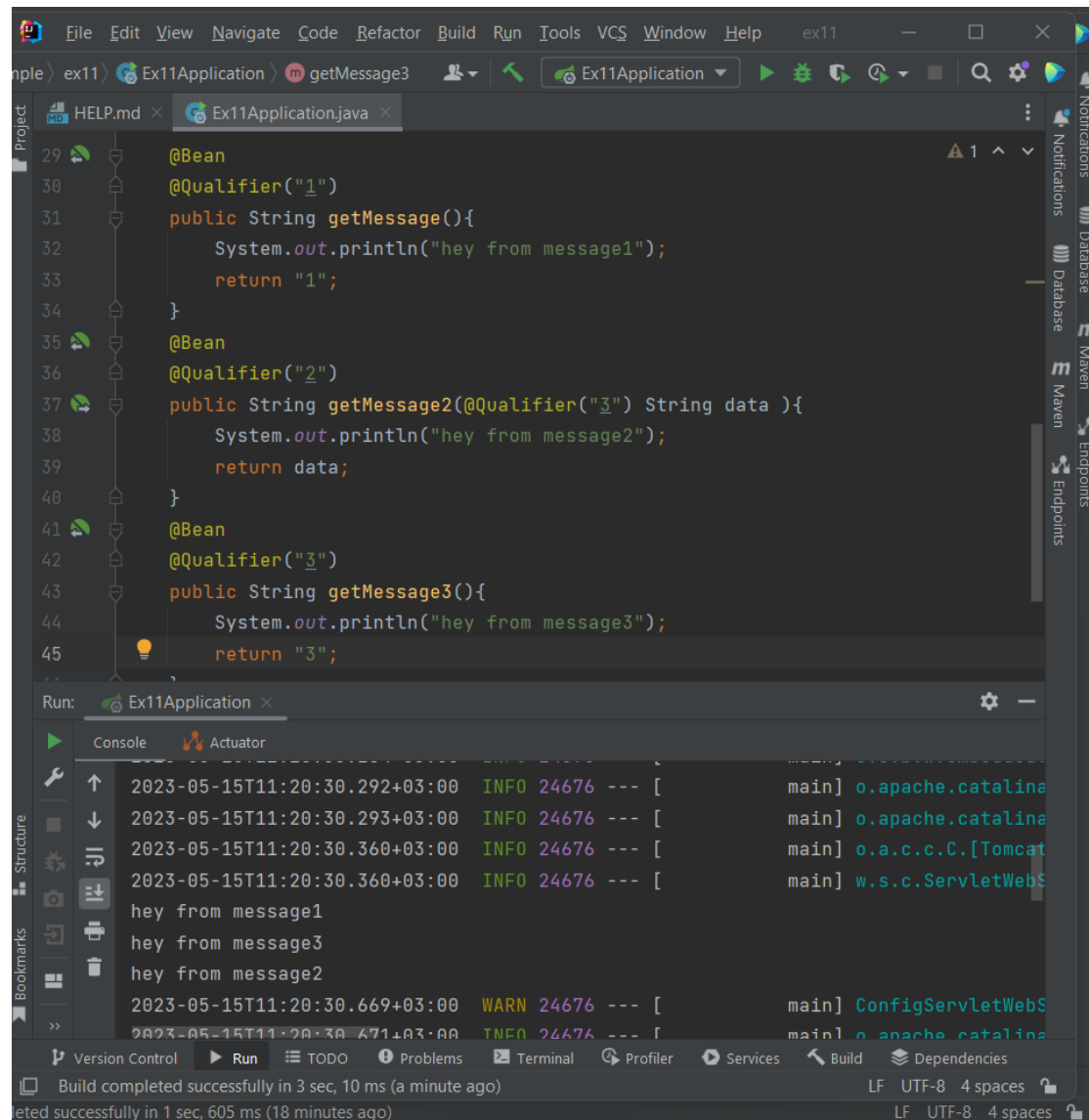
The bottom status bar indicates: "Build completed successfully in 5 sec, 840 ms (2 minutes ago)" and "Tested successfully in 1 sec, 605 ms (14 minutes ago)".

Q3: output

hey from message1

hey from message3

hey from message2



The screenshot shows an IDE window with a Java file named `Ex11Application.java`. The code defines three methods: `getMessage1()`, `getMessage2()`, and `getMessage3()`. Each method prints a message and returns a value. The `getMessage2()` method takes a parameter `data` and returns it. The `getMessage3()` method returns the string "3".

```
29 @Bean
30 @Qualifier("1")
31 public String getMessage(){
32     System.out.println("hey from message1");
33     return "1";
34 }
35 @Bean
36 @Qualifier("2")
37 public String getMessage2(@Qualifier("3") String data ){
38     System.out.println("hey from message2");
39     return data;
40 }
41 @Bean
42 @Qualifier("3")
43 public String getMessage3(){
44     System.out.println("hey from message3");
45     return "3";
46 }
```

The Run console shows the output of the application. The output is as follows:

```
2023-05-15T11:20:30.292+03:00 INFO 24676 --- [main] o.apache.catalina
2023-05-15T11:20:30.293+03:00 INFO 24676 --- [main] o.apache.catalina
2023-05-15T11:20:30.360+03:00 INFO 24676 --- [main] o.a.c.c.C.[Tomcat
2023-05-15T11:20:30.360+03:00 INFO 24676 --- [main] w.s.c.ServletWebS
hey from message1
hey from message3
hey from message2
2023-05-15T11:20:30.669+03:00 WARN 24676 --- [main] ConfigServletWebS
2023-05-15T11:20:30.671+03:00 INFO 24676 --- [main] o.apache.catalina
```

The bottom status bar indicates that the build completed successfully in 3 seconds and 10 milliseconds (a minute ago).

Q4: output

hey from message1

hey from Main controller

hey from message3

hey from message2

The screenshot shows an IDE window with the following components:

- Editor:** Displays `Ex11Application.java`. The code includes a `System.out.println("hey from message3");` statement, a `return "3";` statement, and a `@Component` annotated `MainController` class. The `MainController` class has a `String data` attribute and a `public MainController(@Qualifier("_1") String data)` constructor that sets `this.data = data` and prints "hey from Main controller".
- Run:** Shows the execution of `Ex11Application`.
- Console:** Displays the output of the application. The output is as follows:

```
2023-05-15T11:45:09.025+03:00 INFO 23764 --- [main] o.apache.catalina
2023-05-15T11:45:09.093+03:00 INFO 23764 --- [main] o.a.c.c.C.[Tomcat
2023-05-15T11:45:09.094+03:00 INFO 23764 --- [main] w.s.c.ServletWebS
hey from message1
hey from Main controller
hey from message3
hey from message2
2023-05-15T11:45:09.422+03:00 WARN 23764 --- [main] ConfigServletWebS
2023-05-15T11:45:09.424+03:00 INFO 23764 --- [main] o.apache.catalina
```
- Bottom Bar:** Shows the status of the build and the current cursor position. The build completed successfully in 1 sec, 687 ms (a minute ago). The cursor is at 18:1 (78 chars, 3 line breaks) LF UTF-8 4 spaces.

Q5: output

hey from message3

hey from message2

hey from Main controller

hey from message1

The screenshot shows an IDE window with the following components:

- Project Explorer:** Shows a project named 'ex11' with files 'HELP.md' and 'Ex11Application.java'.
- Code Editor:** Displays the content of 'Ex11Application.java'. The code includes:

```
100 @Bean
101 @Qualifier("3")
102 public String getMessage3(){
103     System.out.println("hey from message3");
104     return "3";
105 }
106
107 1 usage
108 @Component
109 public class MainController {
110     1 usage
111     String data;
112     public MainController (@Qualifier ("2") String data) {
113         this.data=data;
114         System.out.println("hey from Main controller");
115     }
116 }
```
- Run Console:** Shows the output of the application. The output is:

```
2023-05-15T11:36:02.210+03:00 INFO 4728 --- [main] o.a.c.c.C.[Tomcat]
2023-05-15T11:36:02.210+03:00 INFO 4728 --- [main] w.s.c.ServletWebSe
hey from message3
hey from message2
hey from Main controller
hey from message1
2023-05-15T11:36:02.549+03:00 WARN 4728 --- [main] ConfigServletWebSe
2023-05-15T11:36:02.553+03:00 INFO 4728 --- [main] o.apache.catalina.
2023-05-15T11:36:02.568+03:00 INFO 4728 --- [main] s.h.a.l.Condition
```
- Bottom Bar:** Shows the status of the build: 'Build completed successfully in 2 sec, 297 ms (a minute ago)'. It also displays the current time '92:20' and encoding 'UTF-8'.