```
2 package com.ameya.test;
 3
 4
   import java.util.HashMap;
 5 import java.util.List;
 6 import java.util.Map;
7
8 import org.springframework.core.ParameterizedTypeReference;
 9 import org.springframework.http.HttpHeaders;
10 import org.springframework.http.HttpMethod;
   import org.springframework.http.ResponseEntity;
11
   import org.springframework.web.client.RestTemplate;
12
13
   import com.ameya.models.Topic;
14
15
   public class TestRestTemplate {
16
17
18
      public static void main(String[] args) {
19
         final String getByIdUri="http://localhost:9001/topics/{id}";
         final String postUri="http://localhost:9001/topics/create";
20
21
         final String getAllUri="http://localhost:9001/topics";
22
23
         RestTemplate restTemplate=new RestTemplate();
24
25
         Map<String, Integer> params=new HashMap<>();
         params.put("id", 102);
26
27
         String strTopic=restTemplate.getForObject(getByIdUri,String.class.params);
         System.out.println("String => "+strTopic);
28
29
         System.out.println("-----"):
30
         Topic topic=restTemplate.getForObject(getByIdUri,Topic.class.params);
31
         System.out.println("Topic => "+topic);
32
33
         System.out.println("-----");
34
         ResponseEntity<Topic> topicResponse=restTemplate.getForEntity(getByIdUri,
35
         Topic.class, params);
         Topic topic1=topicResponse.getBody();
36
37
         System.out.println(topic1);
38
         System.out.println("------
         ");
39
         Topic newTopic=new Topic(104, "Spring Boot", "Introducing Spring Boot 2 Days");
40
41
         String postResult=restTemplate.postForObject(postUri,newTopic,String.class);
42
43
         System.out.println("Result => "+postResult);
44
```

```
System.out.println("-----");
45
46
                                           ResponseEntity<List<Topic>>
                                           response = restTemplate.exchange (getAllUri, HttpMethod. \textit{GET}, null, the property of the p
                                                                        new ParameterizedTypeReference<List<Topic>>(){});
47
                                           List < Topic > topics = response.getBody();
48
                                           for(Topic t : topics) {
49
                                                          System.out.println(t);
50
51
                                           }
                                           System.out.println("-----");
52
53
                                           HttpHeaders headers1=response.getHeaders();
54
                                           System.out.println("Headers1 => "+headers1);
55
56
                                           HttpHeaders headers2=topicResponse.getHeaders();
57
                                           System.out.println("Headers2 => "+headers2);
58
59
                             }
60
61 }
62
```