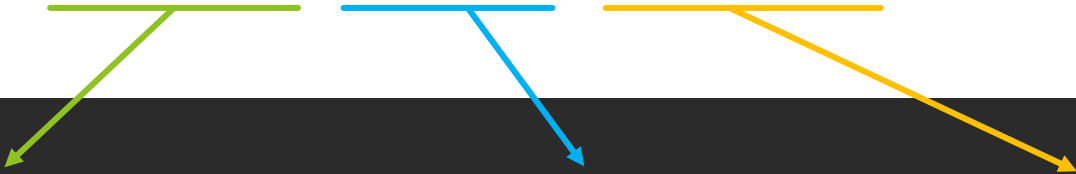# Spring Professional Exam Tutorial v5.0

Question 07

Question 07 - What is @RequestParam used for?

@RequestParam is used to bind web request parameters to controller method parameter.

/index?name=John&city=NYC&country=US

```java
@GetMapping("/index")
public String index(@RequestParam("name") String name, @RequestParam("city") String city, @RequestParam("country") String country) {
    ...
}
```

Because Servlet API combines query parameters and form data into a single parameters map, it is possible to use @RequestParam annotation to map:

▶ query parameters

▶ form data

▶ parts in multipart requests

Question 07 - What is @RequestParam used for?

`@RequestParam` allows you to specify following parameters:

- `name` – the name of request parameter to bind

- `required` - whether the parameter is required or not
  - by default parameter is required and in case of it being absent exception will be thrown
  - If switched to false, in case of parameter being absent null value will be provided or value pointed out by defaultValue property

- `defaultValue` – allows you to specify default value to use in case of absence of optional parameter

`@RequestParam` annotation also supports Java 8 `Optional`, so following will be equal:

```
@RequestParam(value = "city", required = false) String city
```

⟷

```
@RequestParam(value = "city") Optional<String> city
```

Question 07 - What is @RequestParam used for?

`@RequestParam` also supports additional use cases, like:

▶ Mapping all request parameters to Map

`/index?name=John&city=NYC&country=US`

```java
@GetMapping("/index")
public String index(@RequestParam Map<String, String> parameters) {
    ...
}
```

▶ Mapping all values to List

`/index?cities=1,2,3`

```java
@GetMapping("/index")
public String index(@RequestParam("cities") List<String> cities) {
    ...
}
```