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Spring Boot 9AM

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YAML (__.yaml)

- *) YAML - YAMAlian Language.
- *) This is a file (like Text Format) which stores data in key=val format (without any duplicate words/levels).
- *) But, Still Java supports key-val pairs input using '__.properties'.
- *) YAML is a new Format of writing Properties.
- *) YAML File internally converted into Properties(C) format only using API : Snake YAML.

----Note-----

- *) Level in Key = Symbol dot(.) in keys creates a new/next level
ex: my.app.code=A
Her my - 1st level in key, app-2nd level in key, code-3rd level in key

- *) In realtime we use keys which may have more duplicate levels.

Ex:

---application.properties-----
spring.datasource.driver-class-name=OracleDriver
spring.datasource.url=jdbc:oracle
spring.datasource.username=system
spring.datasource.password=abc

--application.yml--
spring:
 datasource:
 driver-class-name: OracleDriver
 url: jdbc:oracle
 username: system
 password: abc

=====RULES TO WRITE YAML FILE
=====

1. Replace dot(.) and equals(=) with colon(:)

__.properties
my.app.id=10
my.app.code=A

__.yaml
my:app:id:10
my:app:code:A

2. After colon , move next level/word to next line
[Do not write duplicates]

__.yaml

```
my:
app:
id:10
code:A
```

3. Before every new level(not 1st level) provide spaces (at least one)
[Space count must match for same level]

```
___.yaml
my:
  app:
    id:10
    code:A
```

4. Finally for value, give exactly one space (between last level and data)

```
___.yaml    (final yaml output)
my:
  app:
    id: 10    //one space only between last level and value.
    code: A
```

1. Replace dot(.) and equals(=) with colon(:)
 2. new next level/word goto to next line
[Do not write duplicates]
 3. at least one space / Space count must match for same level
 4. after last level and value, give one space
- ** tab space also valid.

=====Examples=====

Ex#1.

--application.properties---

```
my.app.code=A
my.app.model=B
my.grade.service=new
my.grade.cost=600
```

---application.yml---

```
my:
  app:
    code: A
    model: B
  grade:
    service: new
    cost: 600
```

Ex#2

--application.properties---

```
spring.jpa.show-sql=true
spring.jpa.ddl-auto=create
spring.hikari.size=20
spring.hikari.name=hrk
```

---application.yml---

```
spring:
  jpa:
    show-sql: true
    ddl-auto: create
  hikari:
    size: 20
    name: hrk
-----
```

Ex#3

```
---application.properties---
spring.jpa.hibernate.auto-create=true
spring.jpa.show-sql=true
spring.jpa.hibernate.format.export=new
spring.jpa.model=entity
spring.jpa.grade.code=accept
```

---application.yml---

```
spring:
  jpa:
    hibernate:
      auto-create: true
      format:
        export: new

    show-sql: true
    model: entity
    grade:
      code: accept
-----
```

Ex#4

```
---application.properties---
my.grade.mode=A
spring.format.text=one
my.accept.mode=new
spring.jpa.show=true
my.grade.state=SA
spring.format.active=true
spring.jpa.final=mode
```

---application.yml---

```
my:
  grade:
    mode: A
    state: SA
  accept:
    mode: new
spring:
  format:
    text: one
    active: true
  jpa:
    show: true
    final: mode
```

*) if we do not follow proper rules to write __.yaml file
then SnakeYAML API throws data parsing exception like

```
org.yaml.snakeyaml.scanner.ScannerException:  
mapping values are not allowed here
```

*) duplicate keys are not allowed in YAML
org.yaml.snakeyaml.constructor.DuplicateKeyException: while
constructing a mapping

-----code-----

```
#1 Create Spring Boot Starter Project  
Name : SpringBoot2YamlExp
```

```
#2. create YAML file under src/main/resource folder  
> Right click on 'src/main/resource' folder  
> new > file > enter name 'application.yml'
```

```
#3. Provide data  
--application.yml--  
my:  
  app:  
    id: 9999  
    name: YAML DATA  
    cost: 9898.3  
-----
```

```
#4. Runner class  
package in.nareshit.raghu;
```

```
import org.springframework.beans.factory.annotation.Value;  
import org.springframework.boot.CommandLineRunner;  
import org.springframework.stereotype.Component;
```

```
@Component  
public class DataReadRunner implements CommandLineRunner {  
  
    @Value("${my.app.id}")  
    private Integer pid;  
  
    @Value("${my.app.name}")  
    private String pname;  
  
    @Value("${my.app.cost}")  
    private Double pcost;  
  
    public void run(String... args) throws Exception {  
        System.out.println(this);  
    }  
  
    public String toString() {  
        return "DataReadRunner [pid=" + pid + ", pname=" +  
pname + ", pcost=" + pcost + "];"  
    }  
  
}
```
