

**Creating a Table with JSON field-**

**CREATE TABLE `database1`.`products` (**

**`id` INT UNSIGNED NOT NULL AUTO\_INCREMENT,**

**`name` VARCHAR(45) NOT NULL,**

**`attributes` JSON NOT NULL,**

**PRIMARY KEY (`id`));**

**Out:**

|  |  |  |
| --- | --- | --- |
| **id** | **name** | **attributes** |
|  |  |  |

**Inserting Data in JSON field-**

**INSERT INTO `database1`.`products` (**

**`id` , `name` , `attributes`)**

**VALUES(**

**'101' , 'Sony\_TV' ,**

**'{"screen": "50 inch",**

**"ports": ["hdmi", "usb"],**

**"speakers": {"left": "10 watt", "right": "10 watt"}}');**

**INSERT INTO `database1`.`products` (**

**`id` , `name` , `attributes`)**

**VALUES(**

**'101' , 'Sony\_TV', JSON\_OBJECT("screen", "50 inch", "ports", JSON\_ARRAY("hdmi", "usb"), "speakers", JSON\_OBJECT("left", "10 watt", "right", "10 watt"))**

**);**

|  |  |
| --- | --- |
| **{"screen": "50 inch",**  **"ports": ["hdmi", "usb"],**  **"speakers": {"left": "10 watt", "right": "10 watt"}}** | **JSON\_OBJECT("screen", "50 inch", "ports", JSON\_ARRAY("hdmi", "usb"), "speakers", JSON\_OBJECT("left", "10 watt", "right", "10 watt"))** |

**Consider using JSON\_OBJECT and JSON\_ARRAY functions to avoid sql syntax error(error code-1064)**

**Out:**

|  |  |  |
| --- | --- | --- |
| **id** | **name** | **attributes** |
| **101** | **Sony\_TV** | **{"ports": ["hdmi", "usb"], "screen": "50 inch", "speakers": {"left": "10 watt", "right": "10 watt"}}** |

**Duplicate keys:** If you mention same key more than once, it retains only last key/value pair and removes other key/value pair. **This is called normalization.** Also object keys are sorted.

**INSERT INTO `database1`.`products` (**

**`id` , `name` , `attributes`)**

**VALUES(**

**'101' , 'Sony\_TV', JSON\_OBJECT("screen", "50 inch", "screen", "60 inch", "ports", JSON\_ARRAY("hdmi", "usb"), "speakers", JSON\_OBJECT("left", "10 watt", "right", "10 watt"))**

**);**

**Out:**

|  |  |  |
| --- | --- | --- |
| **id** | **name** | **attributes** |
| |  |  |  | | --- | --- | --- | | 101 |  |  | |  |  |  | | Sony\_TV | {"ports": ["hdmi", "usb"], "screen": "60 inch", "speakers": {"left": "10 watt", "right": "10 watt"}} |

**JSON\_MERGE\_PRESERVE- merges two or more Json objects and creates single Json object.**

**INSERT INTO `database1`.`products` (**

**`id` , `name` , `attributes`)**

**VALUES(**

**'105' , 'Sony\_TV' , JSON\_MERGE\_PRESERVE(JSON\_OBJECT("screen", "60 inch", "ports", JSON\_ARRAY("hdmi", "usb"), "speakers", JSON\_OBJECT("left", "10 watt", "right", "10 watt")),'{"monitor\_type":"LED"}'));**

**Out:**

|  |  |  |
| --- | --- | --- |
| **id** | **name** | **attributes** |
| |  |  |  | | --- | --- | --- | | **105** |  |  | |  |  |  | | **Sony\_TV** | **{"ports": ["hdmi", "usb"], "screen": "60 inch", "speakers": {"left": "10 watt", "right": "10 watt"}, "monitor\_type": "LED"}** |

**JSON\_MERGE\_PRESERVE (**

**JSON\_OBJECT ("screen", "50 inch"),**

**JSON\_OBJECT ("screen", "60 inch"),**

**JSON\_OBJECT ("screen", "70 inch"))**

Out**: {" screen ": ["50 inch ", "60 inch ", "70 inch "]}**

(Needs at least two Json objects to merge (Error Code: 1582. Incorrect parameter count)

Whenever you need to create data as key/value pairs in a separate table, you should consider using a JSON data type field as it can heavily compress your database design.

**If you have any topics, you want me to cover in future videos, kindly comment in the box.**

**Thank you for watching.**

