# Function Description

**Function Name:** validate

**Parameter List:**

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| --- | --- | --- |
| Parameter Name | Type | Description |
| weight | integer | This value represents the weight of an object. It is an integer, which means it can only store whole numbers. The weight is expected to be within the range of 1 to 1000 (including 1 and 1000). If the weight is not within this range, the function will return a result indicating that the weight is invalid. |
| volume | double | This variable denotes an object's volume. Due to its double nature, it can hold decimal numbers. Either 0.25, 0.5, or 1.0 is the volume that is anticipated. The function returns a value designating an invalid volume if the volume does not match any of these values. |
| Struct temp | Struct point | This parameter indicates a point on a two-dimensional grid, similar to a map. The position is represented by attributes like "col" and "row" in a structure named Point. Checking whether the given point is within the permitted range of coordinates (from 0 to the maximum number of columns for "col" and from 0 to the maximum number of rows for "row") is done using the "temp" argument. The function will show that the point is invalid if it is outside of this range. |
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**Returns:** The function returns an integer (res) representing the result of the validation process. The possible return values are:

1. The function returns an INVALID\_WEIGHT value if the weight is invalid.
2. The function returns an INVALID\_VOLUME result if the volume is invalid.
3. The function returns an INVALID\_POINT value if the point is invalid.
4. The function returns 0 if all the parameters pass the validation checks, signifying that the validation was successful.

**Description:** The validate function checks if an object's weight, volume, and location meet specific standards. It gives a number as a result to show if the validation was successful or not. If the weight is not between 1 and 1000, the function returns an error code. Similarly, if the volume is not 0.25, 0.5, or 1.0, it gives an error code. Additionally, if the object's position is outside the allowed range of coordinates, the function returns an error code. If all the parameters meet the requirements, the function returns 0 to indicate successful validation.