Product Quality Data

This is product quality data obtained during the manufacturing process. There are four CSV data files in it: 1) param\_data\_train, 2) param\_data\_test, 3) param\_data\_timevarying\_train, and 4) param\_data\_timevarying\_test. Your task is to use the test datasets to predict whether the product quality is good (1) or bad (0).

1. param\_data\_train file description:

|  |  |
| --- | --- |
| **Column Name** | **Description** |
| product\_no | Batch production number |
| label | Good (1) vs. Bad (0) quality |
| param1 | Brand name for raw material 1 |
| param2 | Brand name for raw material 2 |
| param3 | A type of raw material |
| param4 |  |
| param5 | Size of raw material 5 |
| param6 |  |
| param7 |  |
| param8 |  |
| param9 |  |
| param10 | The ratio of using raw material X to Y |

1. param\_data\_test file description (not have label column):

|  |  |
| --- | --- |
| **Column Name** | **Description** |
| product\_no | Batch production number |
| param1 | Brand name for raw material 1 |
| param2 | Brand name for raw material 2 |
| param3 | A type of raw material |
| param4 |  |
| param5 | Size of raw material 5 |
| param6 |  |
| param7 |  |
| param8 |  |
| param9 |  |
| param10 | The ratio of using raw material X to Y |

1. param\_data\_timevarying\_train file description:

|  |  |
| --- | --- |
| **Column Name** | **Description** |
| product\_no | Batch production number |
| param\_name | Parameter name |
| param\_value | Parameter value |
| addtime | Timestamp |

1. param\_data\_timevarying\_test file description (same as File 3):

|  |  |
| --- | --- |
| **Column Name** | **Description** |
| product\_no | Batch production number |
| param\_name | Parameter name |
| param\_value | Parameter value |
| addtime | Timestamp |