Table

Contents

class openstaadpy.os_analytical.ostable.**OSTable** [source]

Bases: object

AddTable(*report_no: int, table_name: str, row_count: int, col_count: int*) [source]

Add or create a report data table and returns the table no for a specified table.

Parameters:

- **report_no** (*int*) – Report number.
- **table_name** (*str*) – Report Table Name.
- **row_count** (*int*) – row count of the specified table.
- **col_count** (*int*) – column count of the specified table.

Returns:

Return table number

Return 0 if Create table error.

Return type:

int

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
```

CreateReport(*report_title: str*) [source]

Creates a report with the specified title.

Parameters:

report_title (*str*) – A string containing the title of the report.

Returns:

Return report number

Return 0 if Create Report error.

Return type:

int

Example

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
```

DeleteReport(*report_no: int*) [source]

Delete an existing report.

Parameters:

report_no (*int*) – Report number.

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.DeleteReport(report_no)
```

DeleteTable(*report_no: int, table_no: int*) [source]

Delete an existing table from report data.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.

Return type:

None

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.DeleteTable(report_no, table_number)
```

GetCellValue(*report_no: int, table_no: int, row_no: int, col_no: int*) [source]

Get cell values for a specified table.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_no** (*int*) – Row number for specified table, start from 1.
- **col_no** (*int*) – Column number for specified table, start from 1.

Returns:

Returns cell value for specified cell in the table

Return type:

string

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> table_count = staad_obj.Table.SetCellValue(report_no, table_number,
>>> cell_value = staad_obj.Table.GetCellValue(report_no, table_number,
```

GetReportCount()

[source]

Returns the number of reports created.

Returns:

Return the number of reports created.

Return type:

int

Return type:

None

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_count = staad_obj.Table.GetReportCount()
```

GetTableCount(*report_no: int*)

[source]

Get table count in a specified report

Parameters:

report_no (*int*) – Report number.

Returns:

Returns table count in a specified report

Return type:

int

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> table_count = staad_obj.Table.GetTableCount(report_no)
```

RenameTable(*report_no: int, table_no: int, table_name: str*)

Rename an existing report table. [source]

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **table_name** (*str*) – Report Table Name.

Return type:

None

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.RenameTable(report_no, table_number, "Table2")
```

ResizeTable(*report_no: int, table_no: int, row_nos: int, col_nos: int*)

[source]

Resize existing table by increasing numbers of rows and columns from report data.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_nos** (*int*) – row count for specified table.

- **col_nos** (*int*) – column count for specified table.

Return type:

None

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.ResizeTable(report_no, table_number, 12, 6)
```

SaveReport(*report_no: int*) [source]

Saves the specified report along with all its tables.

Parameters:

report_no (*int*) – Providing the report number identifying the STAAD report which is to be saved

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> staad_obj.Table.SaveReport(report_no)
```

SaveReportAll() [source]

Saves all the reports created.

Return type:

None

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> staad_obj.Table.SaveReportAll()
```

SaveTable(*report_no: int*, *table_no: int*) [source]

Save a report table.

Parameters:

- **report_no** (*int*) – Report number.
- **TableNo** (*int*) – Table number in specified report.

Return type:

None

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SaveTable(report_no, table_number)
```

SetCellTextBold(*report_no: int*, *table_no: int*, *row_no: int*, *col_no: int*) [source]

Sets the text in a given row and column to bold.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_no** (*int*) – Row number for specified table, start from 1.
- **col_no** (*int*) – Column number for specified table, start from 1.

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetCellValue(report_no, table_number, 1, 5, "abc")
>>> staad_obj.Table.SetCellTextBold(report_no, table_number, 1, 5)
```

SetCellTextColor(*report_no: int, table_no: int, row_no: int, col_no: int, red: int, green: int, blue: int*) [source]

Sets the color of the text to be displayed in a particular cell. By default, the color is always set to black.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_no** (*int*) – Row number for specified table, start from 1.
- **col_no** (*int*) – Column number for specified table, start from 1.
- **red** (*int*) – An integer between 0 and 255 that represents the intensity of red in the color for the text.
- **green** (*int*) – An integer between 0 and 255 that represents the intensity of green in the color for the text.
- **blue** (*int*) – An integer between 0 and 255 that represents the intensity of blue in the color for the text.

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetCellValue(report_no, table_number, 1, 5, "abc")
>>> staad_obj.Table.SetCellTextColor(report_no, table_number, 1, 5, 240
```

SetCellTextHorzAlignment(*report_no: int, table_no: int, row_no: int, col_no: int, align: int*) [source]

Sets the text in a particular row and column to a specified horizontal alignment. By default, all the text is right justified.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_no** (*int*) – Row number for specified table, start from 1.
- **col_no** (*int*) – Column number for specified table, start from 1.
- **align** (*int*) – align Sets the text in a particular row and column to a specified horizontal alignment. The possible values are:0 = left; 1 = center; 2 = right

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetCellValue(report_no, table_number, 1, 5, "abc")
>>> staad_obj.Table.SetCellTextHorzAlignment(report_no, table_number, 1
```

SetCellTextItalic(*report_no: int, table_no: int, row_no: int, col_no: int*) [source]

Italicizes the text in a given row and column.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_no** (*int*) – Row number for specified table, start from 1.
- **col_no** (*int*) – Column number for specified table, start from 1.

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetCellValue(report_no, table_number, 1, 5, "abc")
>>> staad_obj.Table.SetCellTextItalic(report_no, table_number, 1, 5)
```

SetCellTextSize(*report_no: int, table_no: int, row_no: int, col_no: int, size: float*) [source]

Sets the text in a particular row and column to a certain font size. The font sizes are equivalent to the ones used in Microsoft Word.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_no** (*int*) – Row number for specified table, start from 1.
- **col_no** (*int*) – Column number for specified table, start from 1.
- **size** (*float*) – Containing the size of the font to set the text to.

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetCellValue(report_no, table_number, 1, 5, "abc")
>>> staad_obj.Table.SetCellTextSize(report_no, table_number, 1, 5, 12.2
```

SetCellTextSizeAll(*report_no: int, table_no: int, size: float*) [source]

Sets the text in the entire table to FontSize. The font sizes are equivalent to the ones used in Microsoft Word.

Parameters:

- **report_no** (*int*) – Report number.

- **table_no** (*int*) – Table number in specified report.
- **size** (*float*) – Containing the size of the font to set the text to.

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 11, 5)
>>> staad_obj.Table.SetCellTextSizeAll(report_no, table_number, 5)
```

SetCellTextUnderline(*report_no: int, table_no: int, row_no: int, col_no: int*) [source]

Underlines the text in a given row and column.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_no** (*int*) – Row number for specified table, start from 1.
- **col_no** (*int*) – Column number for specified table, start from 1.

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetCellValue(report_no, table_number, 1, 5, "abc")
>>> staad_obj.Table.SetCellTextUnderline(report_no, table_number, 1, 5)
```

SetCellTextVertAlignment(*report_no: int, table_no: int, row_no: int, col_no: int, align: int*) [source]

Sets the text in a particular row and column to a specified vertical alignment. By default, all the text is top justified.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_no** (*int*) – Row number for specified table, start from 1.
- **col_no** (*int*) – Column number for specified table, start from 1.
- **align** (*int*) – align Sets the text in a particular row and column to a specified vertical alignment. The possible values are: 0 = top; 4 = center; 8 = bottom

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetCellValue(report_no, table_number, 1, 5, "abc")
>>> staad_obj.Table.SetCellTextVertAlignment(report_no, table_number, 1
```

SetCellValue(*report_no: int, table_no: int, row_no: int, col_no: int, value: str*) [source]

Set cell values for a specified table.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_no** (*int*) – Row number for specified table, start from 1.
- **col_no** (*int*) – Column number for specified table, start from 1.
- **value** (*str*) – Set cell value for specified cell in the table.

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetCellValue(report_no, table_number, 1, 5, "abc")
```

SetColumnHeader(*report_no: int, table_no: int, col_no: int, header: str*) [source]

Sets column header for a specified table.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **col_no** (*int*) – Column number for specified table, start from 1.
- **header** (*str*) – Column header for a specified column in table.

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetColumnHeader(report_no, table_number, 1, "header
```

SetColumnUnitString(*report_no: int, table_no: int, col_no: int, unit_string: str*) [source]

Sets unit for the specific column of a specified table.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **col_no** (*int*) – Column number for specified table, start from 1.
- **unit_string** (*str*) – Set unit for the specific column of a specified table.

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetColumnUnitString(report_no, table_number, 1, "mm
```

SetRowHeader(*report_no: int, table_no: int, row_no: int, header: str*) [source]

Sets row header for the specific row of a specified table.

Parameters:

- **report_no** (*int*) – Report number.
- **table_no** (*int*) – Table number in specified report.
- **row_no** (*int*) – Row number for specified table, start from 1
- **header** (*str*) – Set header for the specific row of a specified table

Examples

```
>>> from openstaadpy import os_analytical
>>> staad_obj = os_analytical.connect()
>>> report_no = staad_obj.Table.CreateReport("testreport")
>>> table_number = staad_obj.Table.AddTable(report_no, "Table1", 10, 5)
>>> staad_obj.Table.SetRowHeader(report_no, table_number, 1, "row1")
```

__init__(*staadObj*) [source]