

```

$ python3
...
>>> from arches import *
>>> try:
...     DyckWord('')
... except DyckWordError as e:
...     print(e)
...
Expression should not be empty
>>> try:
...     DyckWord(' ( )')
... except DyckWordError as e:
...     print(e)
...
Expression can only contain '(' and ')'
>>> try:
...     DyckWord('[]')
... except DyckWordError as e:
...     print(e)
...
Expression can only contain '(' and ')'
>>> try:
...     DyckWord('()')
... except DyckWordError as e:
...     print(e)
...
Unbalanced parentheses in expression
>>> try:
...     DyckWord('())(')
... except DyckWordError as e:
...     print(e)
...
Unbalanced parentheses in expression
>>> w = DyckWord('(((((((((( ))))))))))')
>>> w.report_on_depths()
There is 1 arch of depth 0.
There is 1 arch of depth 1.
There is 1 arch of depth 2.
There is 1 arch of depth 3.
There is 1 arch of depth 4.
There is 1 arch of depth 5.
There is 1 arch of depth 6.
There is 1 arch of depth 7.
There is 1 arch of depth 8.
There is 1 arch of depth 9.
There is 1 arch of depth 10.
There is 1 arch of depth 11.
There is 1 arch of depth 12.
There is 1 arch of depth 13.
>>> w.draw_arches('drawn_dyck_word_1.tex', 0.5)
>>> w.colour_arches('coloured_dyck_word_1.tex', 0.5)
>>> w = DyckWord('((())(()))')
>>> w.report_on_depths()
There are 3 arches of depth 0.
There is 1 arch of depth 1.
There is 1 arch of depth 2.
There is 1 arch of depth 3.
>>> w.draw_arches('drawn_dyck_word_2.tex')
>>> w.colour_arches('coloured_dyck_word_2.tex')
>>> w = DyckWord('((((( ))(( ))(( ))))')
>>> w.report_on_depths()
There are 5 arches of depth 0.
There are 2 arches of depth 1.
There is 1 arch of depth 2.
There is 1 arch of depth 3.
>>> w.draw_arches('drawn_dyck_word_3.tex', 0.6)
>>> w.colour_arches('coloured_dyck_word_3.tex', 0.6)
>>> w = DyckWord('(((((( ))(( ))(( ))(( ))(( ))(( ))))')
>>> w.report_on_depths()
There are 11 arches of depth 0.
There are 4 arches of depth 1.

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There are 2 arches of depth 2.

There is 1 arch of depth 3.

There is 1 arch of depth 4.

There is 1 arch of depth 5.

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>>> w.draw_arches('drawn_dyck_word_4.tex', 0.3)
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>>> w.colour_arches('coloured_dyck_word_4.tex', 0.3)
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>>> ^D
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