```
组合图表
# 并行多图 Grid()
from pyecharts import options as opts
from pyecharts.charts import Bar, Grid, Line
from pyecharts.faker import Faker
bar = (
       Bar()
        .add_xaxis(Faker.choose())
       .add_yaxis("商家A", Faker.values())
.add_yaxis("商家B", Faker.values())
        . \ \mathtt{set\_global\_opts} \ (\mathtt{title\_opts=opts}. \ \mathtt{Title0pts} \ (\mathtt{title="Grid-Bar"}))
line = (
       Line()
        .add_xaxis(Faker.choose())
       .add_yaxis("商家A", Faker.values())
        .add_yaxis("商家B", Faker.values())
        .set_global_opts(
                title_opts=opts.TitleOpts(title="Grid-Line", pos_top="48%"),
                legend_opts=opts.LegendOpts(pos_top="48%"),
        )
)
grid = (
        Grid()
        .add(bar, grid_opts=opts.GridOpts(pos_bottom="60%")) # 相对于底部高 60 %
        .add(line, grid_opts=opts.GridOpts(pos_top="60%"))
        .render_notebook()
)
grid
```

```
from pyecharts import options as opts
from pyecharts.charts import Grid, Line, Scatter
from pyecharts.faker import Faker
scatter = (
        Scatter()
         .add_xaxis(Faker.choose())
        .add_yaxis("商家A", Faker.values())
.add_yaxis("商家B", Faker.values())
        .set_global_opts(
                 title_opts=opts.TitleOpts(title="Grid-Scatter"),
                  legend_opts=opts.LegendOpts(pos_left="20%"),
line = (
        Line()
         .\, {\tt add\_xaxis} \, ({\tt Faker.} \, {\tt choose} \, () \, )
        .add_yaxis("商家A", Faker.values())
.add_yaxis("商家B", Faker.values())
         .set_global_opts(
                  title_opts=opts.TitleOpts(title="Grid-Line", pos_right="5%"),
                  legend_opts=opts.LegendOpts(pos_right="20%"),
)
grid = (
        \operatorname{Grid}()
        .add(scatter, grid_opts=opts.GridOpts(pos_left="55%"))
         .add(line, grid_opts=opts.GridOpts(pos_right="55%"))
         .render_notebook()
)
grid
```

## # 选项卡多图

```
from \quad pyecharts \quad import \quad options \quad as \quad opts
from pyecharts.charts import Bar, Grid, Line, Pie, Tab
from pyecharts.faker import Faker
def bar_datazoom_slider():
        c = (
                 .add_xaxis(Faker.days_attrs)
                 .add_yaxis("商家A", Faker.days_values)
                 .set_global_opts(
                         title_opts=opts.TitleOpts(title="Bar-DataZoom (slider-水平)"),
        )
        return c
def line_markpoint() :
        c = (
                 Line()
                 .add xaxis(Faker.choose())
                 .add_yaxis(
                          "商家A",
                         Faker.values(),
                 .set_global_opts(title_opts=opts.TitleOpts(title="Line-MarkPoint"))
        return c
def pie_rosetype():
        v = Faker.choose()
        c = (
                 Pie()
                 .add(
                         ,
[list(z) for z in zip(v, Faker.values())],
radius=["30%", "75%"],
center=["25%", "50%"],
                          rosetype="radius",
                          label_opts=opts.LabelOpts(is_show=False),
                 .set_global_opts(title_opts=opts.TitleOpts(title="Pie-玫瑰图示例"))
        )
        return c
tab = Tab()
tab.add(bar_datazoom_slider(), "bar-example")
tab.add(line_markpoint(), "line-example")
tab.add(pie_rosetype(), "pie-example")
tab.render_notebook()
```