5. Getting Started Tutorial for JupyterWidgets Controls

Step 1: Load related libraries

```
from __future__ import print_function
from ipywidgets import interact, interactive, fixed, interact_manual
import ipywidgets as widgets
```

Step 2: Configure functions

```
def f(x):
return x
```

Step 3: Use UI controls (interact)

```
interact(f, x=10);
```

```
[1]: from __future__ import print_function
     from ipywidgets import interact, interactive, fixed, interact_manual
     import ipywidgets as widgets

[2]: def f(x):
         return x

[3]: interact(f, x=10);
```

x ——○———— 10

10

```
interact(f, x=widgets.IntSlider(min=-10, max=30, step=1, value=10));
```

```
[4]: interact(f, x=widgets.IntSlider(min=-10, max=30, step=1, value=10));
```

x ———●———— 10

10

```
interact(f, x=True);
```

```
[5]: interact(f, x=True);
```

☑ x

True

```
interact(f, x='Hi there!');
```

```
[6]: interact(f, x='Hi there!');
```

x   Hi there!

'Hi there!'

```
@interact(x=True, y=1.0)
def g(x, y):
return (x, y)
```

```
[7]: @interact(x=True, y=1.0)
     def g(x, y):
         return (x, y)
```

☑ x

y ——————○——————   1.00

(True, 1.0)

```
interact(f, x=['apples','oranges']);
```

```
[8]: interact(f, x=['apples','oranges']);
```

x   apples   ⌄

'apples'

```
interact(f, x=[('one', 10), ('two', 20)]);
```

```
[9]: interact(f, x=[('one', 10), ('two', 20)]);
```

x   one   ⌄

10

Jupyter Widgets official website has more examples, and the usage and related explanations are more accurate. Interested friends can enter and learn by themselves. Official website entrance: Jupyter Widgets

```
https://ipywidgets.readthedocs.io/en/stable/examples/Using Interact.html
```