

```
import ipywidgets as widgets
```

✓ 0.0s

```
widgets.IntSlider() # make sure () is there
```

✓ 0.0s



0

```
# to close the widget  
w.close()
```

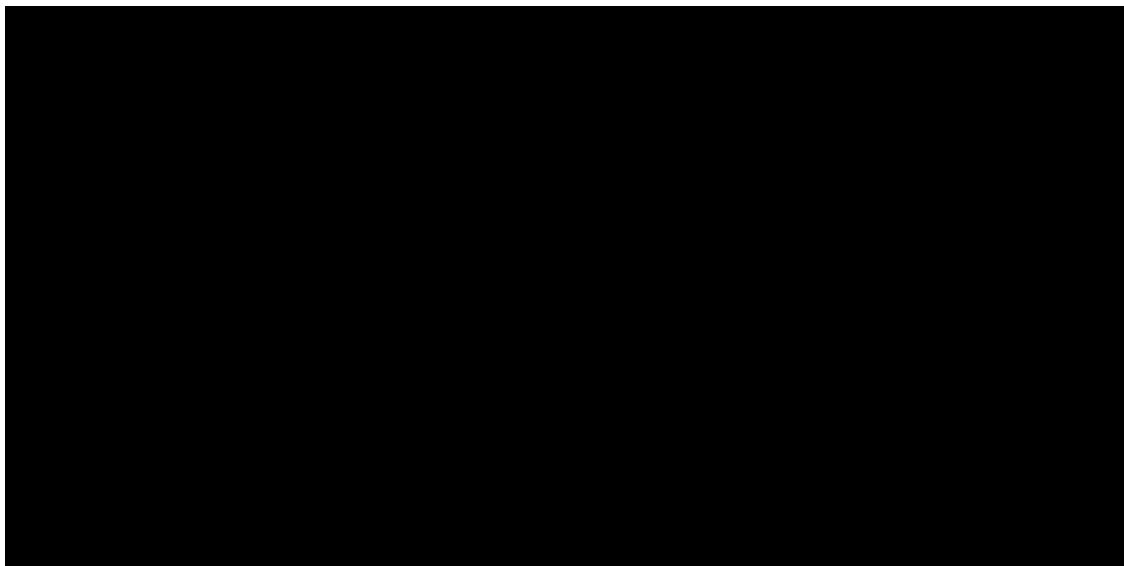
```
display(w) # this display previously set values
```

```
IntSlider(value=50, max=105)
```

```
# re assigning it  
w = widgets.IntSlider()  
display(w)
```

`IntSlider(value=0)`

`w.value` # we can know the current value



```
# we can make the value fix as well
```

```
w.value = 50
```

✓ 0.0s

```
display(w) # you can see that is fixed and we can move if we want
```

✓ 0.0s



50

# we can also set the max value

- `w.max = 105`

✓ 0.0s

`display(w)`

✓ 0.0s



50

```
# we can also take float text  
a = widgets.FloatText()
```

✓ 0.0s

```
display(a) # this take in the float values
```

✓ 0.0s

0

```
# we can also have float slider  
# we can also take float text  
b = widgets.FloatSlider()
```

✓ 0.0s

```
display(b)
```

✓ 0.0s





```
# now lets link the float slider and float text
```

```
my_link = widgets.jslink((a,'value'),(b,'value')) # java script link
```

✓ 0.0s

```
display(a,b) # if we change slider that will effect text
```

```
# wiseversa
```

✓ 0.0s

0.00

```
# now lets fix the max value
```

```
my_link = widgets.jslink((a, 'value'), (b, 'max'))
```

✓ 0.0s

```
display(a,b) # we can change the max value possible
```

✓ 0.0s



0.00

```
# to see all possible properties  
w.keys
```

✓ 0.0s

```
['_dom_classes',  
 '_model_module',  
 '_model_module_version',  
 '_model_name',  
 '_view_count',  
 '_view_module',  
 '_view_module_version',  
 '_view_name',  
 'behavior',  
 'continuous_update',  
 'description',  
 'description_allow_html',  
 'disabled',  
 'layout']
```

```
# Show all available widgets!
```

```
for item in widgets.Widget.widget_types.items():  
    print(item[0])
```

✓ 0.0s

```
('@jupyter-widgets/base', '2.0.0', 'LayoutModel', '@jupyter-widgets/base', '2.0.0', 'LayoutView')  
( '@jupyter-widgets/controls', '2.0.0', 'AccordionModel', '@jupyter-widgets/controls', '2.0.0', 'AccordionView')  
( '@jupyter-widgets/controls', '2.0.0', 'AudioModel', '@jupyter-widgets/controls', '2.0.0', 'AudioView')  
( '@jupyter-widgets/controls', '2.0.0', 'BoundedFloatTextModel', '@jupyter-widgets/controls', '2.0.0', 'FloatTextView')  
( '@jupyter-widgets/controls', '2.0.0', 'BoundedIntTextModel', '@jupyter-widgets/controls', '2.0.0', 'IntTextView')  
( '@jupyter-widgets/controls', '2.0.0', 'BoxModel', '@jupyter-widgets/controls', '2.0.0', 'BoxView')  
( '@jupyter-widgets/controls', '2.0.0', 'ButtonModel', '@jupyter-widgets/controls', '2.0.0', 'ButtonView')  
( '@jupyter-widgets/controls', '2.0.0', 'ButtonStyleModel', '@jupyter-widgets/base', '2.0.0', 'StyleView')  
( '@jupyter-widgets/controls', '2.0.0', 'CheckboxModel', '@jupyter-widgets/controls', '2.0.0', 'CheckboxView')  
( '@jupyter-widgets/controls', '2.0.0', 'CheckboxStyleModel', '@jupyter-widgets/base', '2.0.0', 'StyleView')  
( '@jupyter-widgets/controls', '2.0.0', 'ColorPickerModel', '@jupyter-widgets/controls', '2.0.0', 'ColorPickerView')  
( '@jupyter-widgets/controls', '2.0.0', 'ColorsInputModel', '@jupyter-widgets/controls', '2.0.0', 'ColorsInputView')  
( '@jupyter-widgets/controls', '2.0.0', 'ComboboxModel', '@jupyter-widgets/controls', '2.0.0', 'ComboboxView')
```

```
# lets add discription to int slider
widgets.IntSlider(
    min=0,
    max=10,
    step=2,
    description='Test: '
)
```

✓ 0.0s

Test:  0

```
# we can also change orientation of slider
```

```
widgets.IntSlider(  
    min=0,  
    max=15,  
    description='Test:',  
    orientation='vertical' # by default its horizontal. you can write horizontal also in place of vertical.  
)
```

✓ 0.0s

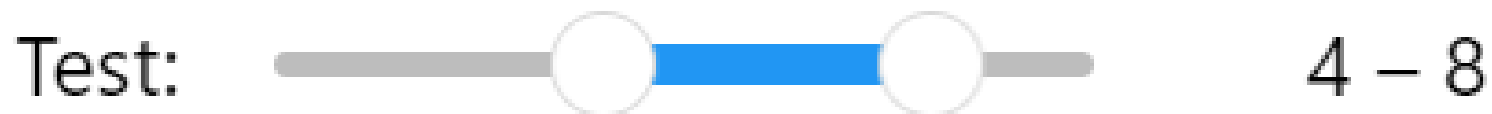
Test:



0

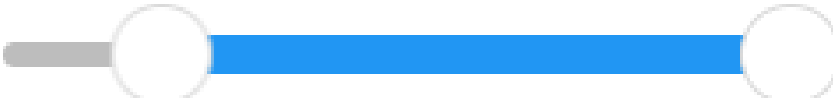
```
#int ranger  
✓ widgets.IntRangeSlider(  
    value=[4, 8], # range is set ove here  
    min=0,  
    max=10,  
    step=1,  
    description='Test:')
```

✓ 0.0s



```
#float ranger
✓ widgets.FloatRangeSlider(
    | value=[2, 10], # range is set ove here
    min=0,
    max=10,
    step=1,
    description='Test: '
)
```

✓ 0.0s

Test:  2.00 – 10.00



```
widgets.IntProgress(  
    value=5,  
    min=0,  
    max=10,  
    description='Loading:', # display in output  
    bar_style='', # 'success', 'info', 'warning', 'danger' or ''  
)
```

✓ 0.0s

Loading:



```
widgets.BoundedIntText( # bounded text mean in value will be max,  
    value=14,    # as we limited to 10 it will not take beyond that value  
    min=0,  
    max=10,  
    step=1,  
    description='Text:',  
    disabled=False  
)
```

0.0s

Text:

```
widgets.IntText( # int text we can go above specified max value  
    value=14, # as not bounded even we can exceed max value  
    min=0,  
    max=10,  
    description='Any: ',  
    disabled=False  
)
```

0.0s

Any:

#Toggle Button

```
widgets.ToggleButton(  
    value=False,  
    description='Click me',  
    button_style='success', # 'success', 'info', 'warning', 'danger' or ''  
    tooltip='Description',  
    icon='check'  
)
```

✓ 0.0s

✓ Click me

```
# check box
widgets.Checkbox(
    value=False,
    description='Check me',
    disabled=False
)
```

✓ 0.0s

☐ Check me

```
# valid
widgets.Valid(
    value=True, # if false we get cross
    description='Valid!',
)
```

✓ 0.0s

Valid! ✓

#dropdown - List

```
✓ widgets.Dropdown(  
    | options=['1', '2', '3'],  
    | description='Roll Number:',  
    | )
```

✓ 0.0s

Roll Number:

1



```
# dropdown - dictionary
widgets.Dropdown(
    options={'One': 1, 'Two': 2, 'Three': 3},
    value=2,
    description='Number:',
)
```

✓ 0.0s

Number:

Two





```
# RadioButtons
widgets.RadioButtons(
    options=['Screen', 'Pencile', 'Case'],
    description='Ipad Essencials:',
    disabled=False
)
```

✓ 0.0s

Ipad Essencials:

- ☒ Screen
- ☐ Pencile
- ☐ Case

```
#Select
```

```
widgets.Select(
```

```
    options=['miui', 'oxygen', 'colour'],
```

```
    description='Android Os:'
```

```
)
```



0.0s

Android Os:

miui

oxygen

colour

```
widgets.SelectionSlider(  
    options=['Cheddar', 'Brie', 'Gouda', 'Mozzarella'],  
    value='Cheddar',  
    description='Favorite cheese:',  
    disabled=False,  
    continuous_update=False,  
    orientation='horizontal',  
    readout=True  
)
```

✓ 0.0s

Favorite che...  Cheddar

```
# toggle buttons
widgets.ToggleButtons(
    options=['Plain', 'Masala', 'Butter', 'Cheese'],
    description='Dosa Type:',
    disabled=False, # disabled=True, the buttons would be non-interactive
    button_style='', # 'success', 'info', 'warning', 'danger' or ''
    tooltips=['A simple dosa without filling', 'Dosa stuffed with spiced potatoes'],
    # icons=['check'] * 3
)
```



0.0s

Dosa Type:

Plain

Masala

Butter

Cheese

• # select multiple

✓ widgets.SelectMultiple(  
 options=['iPhone', 'Android', 'Windows Phone'],  
 value=['Android'],  
 # rows=10,  
 description='Phones',  
 disabled=False  
)# to select multiple yse ctrl or shift + click

✓ 0.0s

Phones

iPhone
Android
Windows Phone

```
# String widgets
✓ widgets.Text(
    value='Hello Akhil',
    placeholder='Type something', # placeholder attribute is used to provide a hint
    description='String:',
    disabled=False
)
✓ 0.0s
```

String:

```
# TextArea
✓ widgets.Textarea(
    value='Hello Akhil',
    placeholder='Type something',
    description='String:',
    disabled=False
) # we can also expand the text area by pressing right down corner.
✓ 0.0s
```

String:

Hello Akhil

```
# Label
widgets.HBox([widgets.Label(value="Rice Cost:"), widgets.FloatSlider())
# if you need to build a custom description next to a control using similar styling to the built-in control
```

✓ 0.0s

Rice Cost:



```
# hello world using html
✓ widgets.HTML(
    value="Hello <b>World</b>",
    placeholder='Place Some HTML',
    description='Some HTML',
)
```

✓ 0.0s

Some HTML Hello **World**

```
# html math
widgets.HTMLMath(
    value=r"Some math and <i>HTML</i>: \((x^2\) and $$\frac{x+1}{x-1}$$",
    placeholder='Some HTML',
    description='Some HTML',
)
```

✓ 0.0s

Some HTML Some math and *HTML*:  $\left(x^2\right)$  and  $\frac{x+1}{x-1}$

```
# button
```

```
✓ widgets.Button(  
    description='Click me',  
    disabled=False,  
    button_style='', # 'success', 'info', 'warning', 'danger' or ''  
    tooltip='Click me',  
    icon='check'  
)
```

✓ 0.0s

✓ Click me