

# I. Setting up the Python environment and libraries

## **AIM:**

- Create a new notebook for Python
- Write and execute Python code
- Create new cells for code and Markdown
- Demonstrate the application of Jupyter Widgets

## **PROCEDURE:**

1. **Install Python and Jupyter Notebook using: pip install notebook.**
2. **Launch Jupyter Notebook by typing jupyter notebook in your terminal.**
3. **Click "New" > "Python 3" to create a new notebook.**
4. **Write Python code in a cell and press Shift + Enter to execute.**
5. **Add new cells using the "+" button, and switch cell types to Markdown for formatted text.**

## **PROGRAM:**

```
import ipywidgets as widgets

from IPython.display import display

slider = widgets.IntSlider(value=50, min=0, max=100, step=1,
description='Value:')

output = widgets.Output()

def on_value_change(change):

    output.clear_output()

    with output:

        print(f'Slider value is {change["new"]}')

slider.observe(on_value_change, names='value')

display(slider, output)
```

## **OUTPUT:**



## **RESULT:**

Thus, the given program was executed successfully.