

Ex 1 Setting up the Python environment and libraries - Jupyter Notebook

AIM:

To understand the working of Jupyter Notebook, write and execute Python code, create new code and Markdown cells, and demonstrate the use of Jupyter Widgets and Jupyter AI.

1. Create a new notebook for Python

Open Anaconda Navigator or Jupyter Lab / Notebook.
Click **New** → **Python 3** to open a fresh notebook.

2. Write and execute Python code

```
a = 5
```

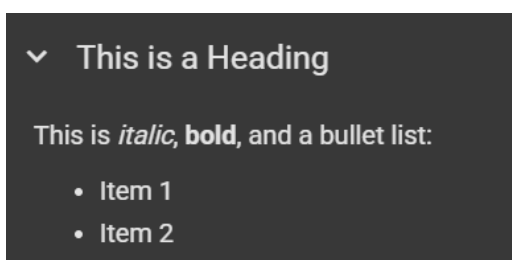
```
b = 7
```

```
print(a + b)
```

OUTPUT:

A dark rectangular box representing a Jupyter Notebook output cell. On the left side, there is a white icon of a document with a right-pointing arrow, which is a standard copy icon. To the right of this icon, the number '12' is displayed in white, representing the output of the Python code execution.

3. Create new cells for code and Markdown

A dark rectangular box representing a Jupyter Notebook Markdown cell. At the top, there is a white chevron icon pointing downwards, followed by the text 'This is a Heading' in white. Below this, there is a line of text: 'This is *italic*, **bold**, and a bullet list:'. Underneath this line, there is a bulleted list with two items: 'Item 1' and 'Item 2', both in white.

4. Demonstrate the application of Jupyter Widgets, Jupyter AI

```
!jupyter labextension install @jupyter-widgets/jupyterlab-manager
```

```
import ipywidgets as widgets
```

```
widgets.IntSlider(
```

```
    value=10,
```

```
    min=0,
```

```
    max=100,
```

```
    step=1,
```

```
    description='Slider:',
```

```
    continuous_update=True
```

```
)
```

OUTPUT:

