In [ ]:

```
# The blue colour outside the cell represents command mode.
# And the green colour indicates edit mode.
# Press 'Esc' to get into command mode.
# Press 'Enter' to go back into edit mode.
# Press 'P' to view the list of all available commands.
```

In [1]:

```
# This is a coding cell.
# Let's write your first Python program here.

Name = input("Enter your name: ")
print("Hello,", Name)

# Press 'Shift + Enter' to execute the cell.
```

```
Enter your name: Taher
Hello, Taher
```

In [ ]:

```
# Writing comments in a code cell can sometimes create confusion. Jupyter notebook works bo
# To write explanatory texts, you can use a markdown cell which enables you to format your
# readable code.

# Let's now learn about markdown cells, then.
# Press 'M' in command mode to convert a code cell to a Markdown cell.
```

This is a Markdown Cell. Double click on a markdown cell or press 'Enter' to see how it's written. And again, press 'Shift + Enter' to execute the cell.

Let's further learn about the various customizations in a markdown cell to create more readable and understandable code.

This is a title

This is a heading

This is a subheading

This is as small as a heading can get

The fifth hash makes it Italic. Wow!

Formatting in Markdown cells

Emphasis

"This will appear bold."

"So will this."

"Just one dash makes it italic."

"And one star on either side as well."

"This one's both bold and italic."

Monospace Fonts

Use a back single quotation mark (`) to get monospace fonts.

```
This text will appear in a monospace font.  Python is a beautiful language.
```

Line Breaks

Sometimes in the markdown cells, you don't get a line break where you want simply by pressing enter. In such cases use `<br>` to get a manual line break.

I want a line break here. But I don't get it. :/
So I used a manual line break
There we go! :)

Indenting

Use `>` to indent your text.

This is the first line

> This indents the second line.
>
> > This further indents it.
> >
> > > And this goes on and on.

Bullets and Numbering

- A dash followed by two spaces, i.e. `'-  '` creates a bullet.
  - Pressing a tab before doing the above creates a sub-bullet.

1. Start with a simple `1.` (1 followed by a dot and space) to get a numbered list.
2. And keep doing it for further numbers.
    A. Again, just a tab for the sub-bullet.

Coloring

- This text will be blue.
- I hate this color!

Adding an Image

You can add an image from the web by using `<img src = "image_path">`

Example:

LaTeX Equations

Jupyter notebook also supports LaTeX equations. Use a `$` on either side to write a LaTeX equation.

The below example is just a hypothetical equation to explain how you can write LaTeX equations in Jupyter notebook.

$$(\frac{a_1}{a_2} + \frac{a_3}{a_4})^2 = a_5^3$$

Go through this link (https://en.wikibooks.org/wiki/LaTeX/Mathematics) if you want to learn the LaTeX syntax.

Basic Commands

That was all about markdown cells. Now let us take a look at the most useful commands that you require every day while coding in the Jupyter notebook.

Command Mode Shortcuts

- `Esc` : To go into command mode
- `Enter` : To go back to edit mode
- `M` : To convert a cell to a markdown cell
- `Y` : To convert a cell back to a code cell
- `A` : To insert new cell above
- `B` : To insert new cell below
- `D + D` : To delete cell
- `Z` : Undo the last operation
- `F` : To find and replace on your code
- `Shift + Up/Down` : To select multiple cells
- `Space` : Scroll notebook downwards
- `Shift + Space` : Scroll notebook upwards

Edit Mode Shortcuts

- `Shift + Enter` : To execute the code in the current cell and go to the next cell
- `Alt + Enter` : To execute the code in the current cell and insert new cell below
- `Shift + Tab` : To get brief documentation of the object that you have just typed in the coding cell
- `Ctrl + Shift + -` : To split the cell at cursor
- `Shift + M` : To merge selected cells

Apart from this, you can also use `H` to open the list of keyboard shortcuts and even add new shortcuts or customize the existing shortcuts according to your personal requirements.

In [ ]: