Fibonacci

Markdown cells

In [1]:
```
def fib(x):
    if x <=1:
        return x
    return fib(x-1) + fib(x-2)
fib(10)
```

Out [1]: 55

Code cells

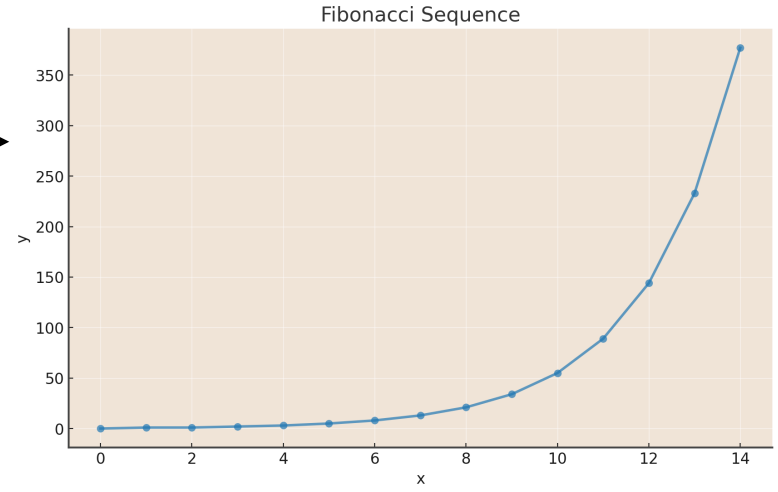
Text output

Lets plot the numbers

In [3]:
```
import matplotlib.pyplot as plt
x = range(15)
y = [fib(n) for n in x]
print('Here is a plot of the fibonacci sequence')
plt.plot(x, y)
```

Out [3]: This is the end of the notebook

Visual output




```
{
 ...
 cells: [
  {
   "cell_type": "code",
   "source": [
    "def fib(x)\n",
     ...
   ],
   "outputs": [
    {
     "output_type": "execute_result",
     "text": "55"
    }
   ]
  }
 ]
}
```

1 Code cells are represented as JSON objects inside the `cells` key. Content of the cell are in the `source` key and the outputs of the cell are in the `outputs` key.

```
cells: [
...
 {
  "cell_type": "code",
  "source": [
   "import matplotlib.pyplot as plt\n",
    ...
  ],
  "outputs": [
   {
    "output_type": "stream",
    "text": "Here is a plot of the fibonacci sequence"
   },
   {
    "output_type": "display_data",
    "data": {
     "image/png": [base64-encoded-png-data]
    }
   ]
  }
 ]
```

2 Code cells can have multiple outputs. The raw content of outputs that produce text are under the `text` key.

3 Visual outputs however have a different JSON schema. They are represented as base64 encoded multi-line strings