**A1 fibonacci**

|  |
| --- |
| **def** printFibSequence**(**n**):**  **if(**n**<=**0**):**  **return;**  **if(**n**==**1**):**  **print(**1**)**  **elif(**n**==**2**):**  **print(**"1 1"**)**  **else:**  preNumber1**=**1  preNumber2**=**1  **print(**"1 1"**,** end**=**" "**)**  **for** i **in** **range(**3**,**n**+**1**):**  fibon**=**preNumber1**+**preNumber2  **print(**fibon**,** end**=**" "**)**  preNumber2**=**preNumber1  preNumber1**=**fibon    printFibSequence**(**6**)** |
|  |

**CSV file**

|  |
| --- |
| **import** pandas **as** pd  **import** matplotlib**.**pyplot **as** plt  data**=[[**'January'**,**'5'**],**  **[**'February'**,** '20'**],**  **[**'august'**,** '10'**]]**  cars **=** pd**.**DataFrame**(**data**,** columns**=[**'month'**,** 'sales'**])**  cars**.**to\_csv**(**'monthly-car-sales.csv'**,** index**=False)**  cars\_data **=** pd**.**read\_csv**(**'monthly-car-sales.csv'**)**  # data shape  **print(**'Shape of data:'**)**  **print(**cars\_data**.**shape**)**  # plot series  x**=**cars\_data**[**'month'**]**  y**=**cars\_data**[**'sales'**]**  plt**.**plot**(**x**,**y**)**  plt**.**show**()** |
|  |

**Sine wave**

|  |
| --- |
| **import** matplotlib**.**pyplot **as** plt  **import** numpy **as** np  f**=**1000 #frequency  x**=** np**.**arange**(**80**)** #samples  fs **=**40000 #Sampling frequency  y**=**np**.**sin**(**2**\***np**.**pi**\***f**\***x**/**fs**)**  plt**.**plot**(**x**,**y**)**  plt**.**show**()** |
|  |