

```
{
  "nbformat": 4,
  "nbformat_minor": 0,
  "metadata": {
    "colab": {
      "provenance": [],
      "collapsed_sections": []
    },
    "kernelspec": {
      "name": "python3",
      "display_name": "Python 3"
    },
    "language_info": {
      "name": "python"
    }
  },
  "cells": [
    {
      "cell_type": "markdown",
      "source": [
        "Basic Python",
        "1. Split this string",
        "2. Use .format() to print the following string. \\n\\n### Output should be: The diameter of Earth is 12742 kilometers.",
        "3. In this nest dictionary grab the word 'hello'",
        "4.1 Create an array of 10 zeros?",
        "4.2 Create an array of 10 fives?",
        "5. Create an array of all the even integers from 20 to 35",
        "6. Create a 3x3 matrix with values ranging from 0 to 8",
        "7. Concatenate a and b",
        "8. Create a dataframe with 3 rows and 2 columns",
        "9. Generate the series of dates from 1st Jan, 2023 to 10th Feb, 2023",
        "10. Create 2D list to DataFrame"
      ],
      "execution_count": null,
      "outputs": []
    },
    {
      "cell_type": "code",
      "source": [
        "s = '\\Hi there Sam!'",
        "planet = '\\Earth\\n'",
        "diameter = 12742",
        "d = {'k1': 1, 2, 3, {'tricky': 'oh, man, inception', {'target': [1, 2, 3, 'hello']}}]",
        "import numpy as np",
        "zeros = np.zeros(10)",
        "fives = np.ones(10) * 5",
        "evens = np.arange(20, 36, 2)",
        "matrix = np.arange(9).reshape((3, 3))",
        "a = np.array([1, 2, 3]), b = np.array([4, 5, 6])",
        "df = pd.DataFrame({'col1': [1, 2, 3], 'col2': [4, 5, 6]})",
        "dates = pd.date_range('2023-01-01', periods=10)",
        "lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]",
        "df2 = pd.DataFrame(lists)"
      ],
      "execution_count": null,
      "outputs": []
    }
  ]
}
```

