

Assignment-1

Name: Dhivyadharsini Satheesh

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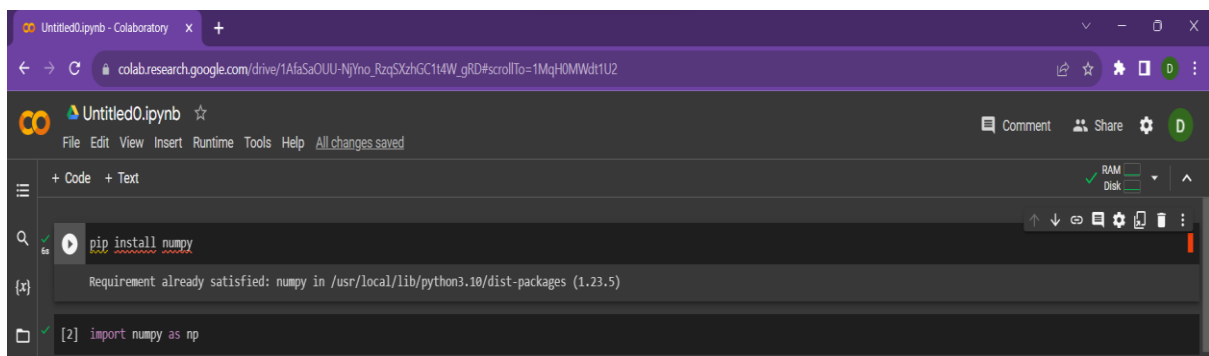
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Campus Name: VIT Vellore

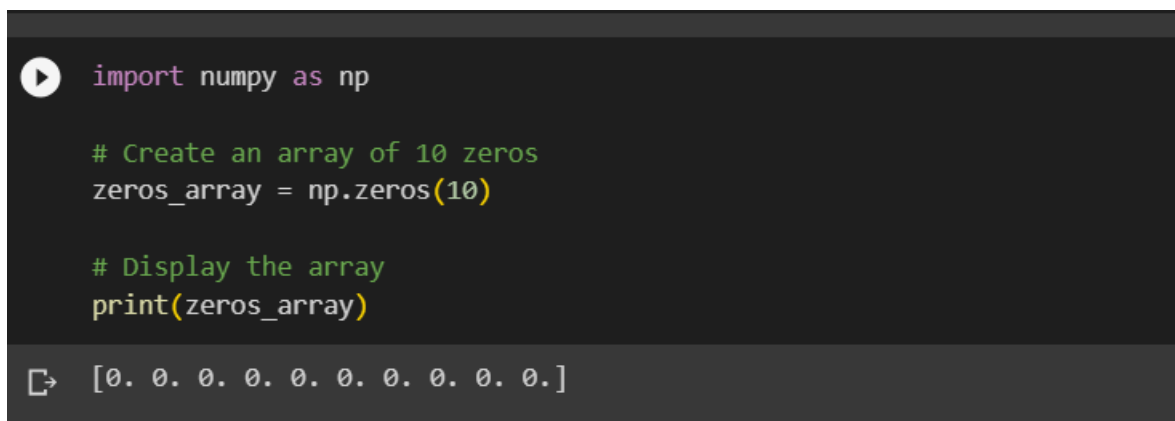
Question:1

```
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Question:2

```
{ "cell_type": "markdown", "metadata": { "colab_type": "text", "id": "qav3VCgyLKv5" }, "source": [ "#### Create an array of 10 zeros" ] }
```



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Question:3

```
{ "cell_type": "code", "execution_count": 0, "metadata": { "colab": {}, "colab_type":  
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}, "outputs": [ { "data": { "text/plain": [ "array([ 0., 0., 0., 0., 0., 0., 0., 0., 0., 0.])" ] } }
```

```
✓ 0s [4] zeros_array = np.zeros(10)  
  
# Display the array  
zeros_array  
  
array([0., 0., 0., 0., 0., 0., 0., 0., 0., 0.] )
```

Question:4

```
{ "cell_type": "code", "execution_count": 0, "metadata": { "colab": {}, "colab_type":  
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"source": [] }
```

```
✓ 0s # Create an array of 10 zeros  
zeros_array = [0.0] * 10  
  
# Display the array two times  
for _ in range(2):  
    print("array", "(" , zeros_array, ")")  
  
array ( [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0] )  
array ( [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0] )
```

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Question:5

{ "cell_type": "markdown", "metadata": { "colab_type": "text", "id": "-r7m8k4vLKv_" },
"source": ["#### Create an array of 10 ones"] }

```
✓ [5] # Create an array of 10 ones  
0s ones_array = np.ones(10)  
  
# Display the array  
print(ones_array)  
  
[1. 1. 1. 1. 1. 1. 1. 1. 1. 1.]
```

Question:6

{ "cell_type": "code", "execution_count": 0, "metadata": { "colab": {}, "colab_type":
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1., 1.])"] } }

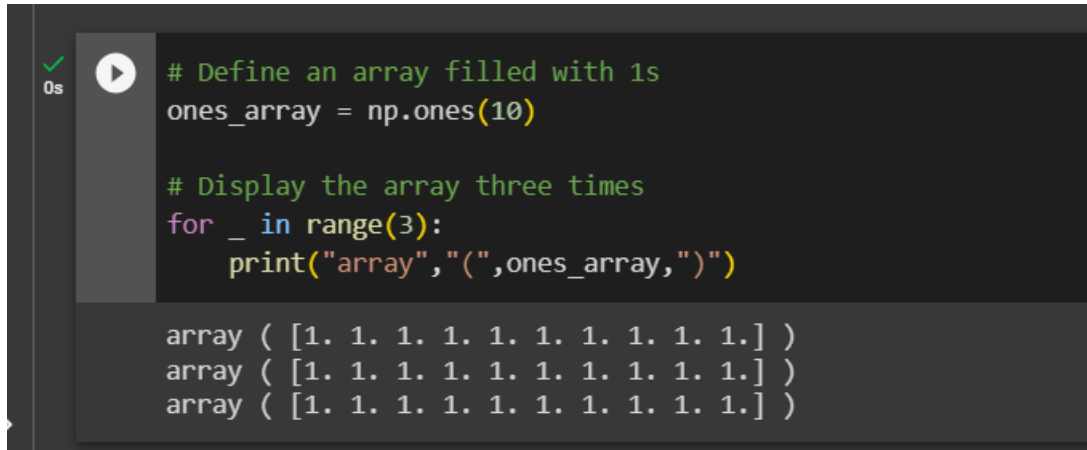
```
[6] # Create an array of 10 ones  
ones_array = np.ones(10)  
  
# Display the array  
ones_array  
  
array([1., 1., 1., 1., 1., 1., 1., 1., 1., 1.])
```

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Question:7

```
{ "cell_type": "code", "execution_count": 0, "metadata": { "colab": {}, "colab_type":  
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1., 1.])" ] }, "execution_count": 3, "metadata": { "tags": [] }, "output_type":  
"execute_result" } ], "source": [] }
```

A screenshot of a Jupyter Notebook cell. On the left, there is a green checkmark and a play button icon. The code in the cell is:

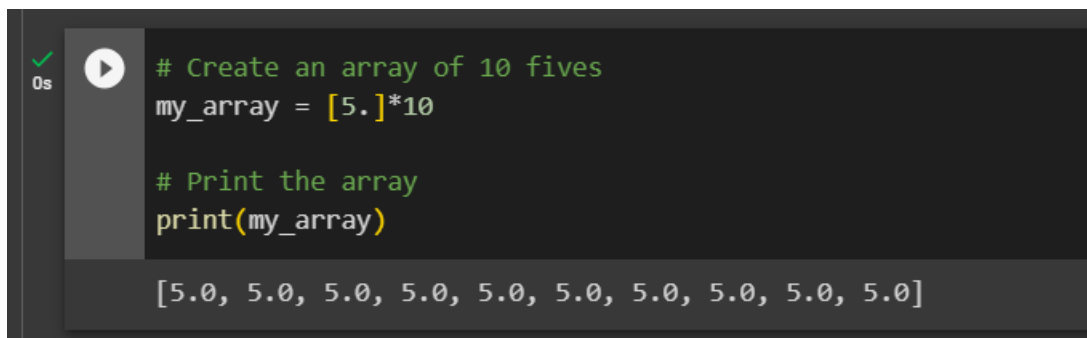
```
# Define an array filled with 1s  
ones_array = np.ones(10)  
  
# Display the array three times  
for _ in range(3):  
    print("array", "(" ,ones_array, ")")
```

 The output of the cell is displayed below the code:

```
array ( [1. 1. 1. 1. 1. 1. 1. 1. 1. 1.] )  
array ( [1. 1. 1. 1. 1. 1. 1. 1. 1. 1.] )  
array ( [1. 1. 1. 1. 1. 1. 1. 1. 1. 1.] )
```

Question:8

```
{ "cell_type": "markdown", "metadata": { "colab_type": "text", "id": "Flcddv6lLKwO" },  
"source": [ "#### Create an array of 10 fives" ] }
```

A screenshot of a Jupyter Notebook cell. On the left, there is a green checkmark and a play button icon. The code in the cell is:

```
# Create an array of 10 fives  
my_array = [5.]*10  
  
# Print the array  
print(my_array)
```

 The output of the cell is displayed below the code:

```
[5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0]
```

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Question:9

```
{ "cell_type": "code", "execution_count": 0, "metadata": { "colab": {}, "colab_type":  
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5., 5., 5.])" ] }
```

```
✓ [19] # Create an array of 10 fives  
0s my_array = [5.0] * 10  
  
# Print the array  
print("array", "(" , my_array, ")")  
  
> array ( [5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0] )
```

Question:10

```
{ "cell_type": "code", "execution_count": 0, "metadata": { "colab": {}, "colab_type":  
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15e78e84b014" }, "outputs": [ { "data": { "text/plain": [ "array([ 5., 5., 5., 5., 5., 5., 5.,  
5., 5., 5.])" ] } } "execution_count": 4, "metadata": { "tags": [] }, "output_type":  
"execute_result" } ], "source": [] }
```

```
✓ [18] # Create an array of 10 fives  
0s my_array = [5.0] * 10  
  
# Display the array four times  
for _ in range(4):  
    print("array", "(" , my_array, ")")  
  
array ( [5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0] )  
array ( [5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0] )  
array ( [5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0] )  
array ( [5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0, 5.0] )
```

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Question:11

{ "cell_type": "markdown", "metadata": { "colab_type": "text", "id": "4UInvEwQLKwg" }, "source": ["#### Create an array of the integers from 10 to 50"] }

```
✓ [12] # Create an array of integers from 10 to 50
0s my_array = [i for i in range(10, 51)]

# Print the array
print(my_array)

[10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50]
```

Question:12

{ "cell_type": "code", "execution_count": 0, "metadata": { "colab": {}, "colab_type": "code", "id": "Z9kAbHHiLKwj", "outputId": "1b2d4a50-b3c4-44af-dd3b-643a6546d019" }, "outputs": [{ "data": { "text/plain": ["array([10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26,\n", " 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43,\n", " 44, 45, 46, 47, 48, 49, 50])"] } }

```
✓ [17] my_array = np.arange(10, 51)
0s

# Print the array
print("array(",my_array,")")

array( [10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33
 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50] )
```