**Assignment -1**

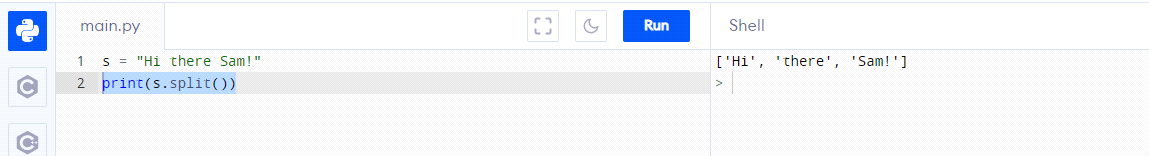
Python Programming

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| Assignment Date | 1 September 2022 |
| Student Name | Tharika Jayaraj |
| Student Roll Number | 113219071045 |
| Maximum Marks | 2 Marks |

**Question-1:**

1. Split this string

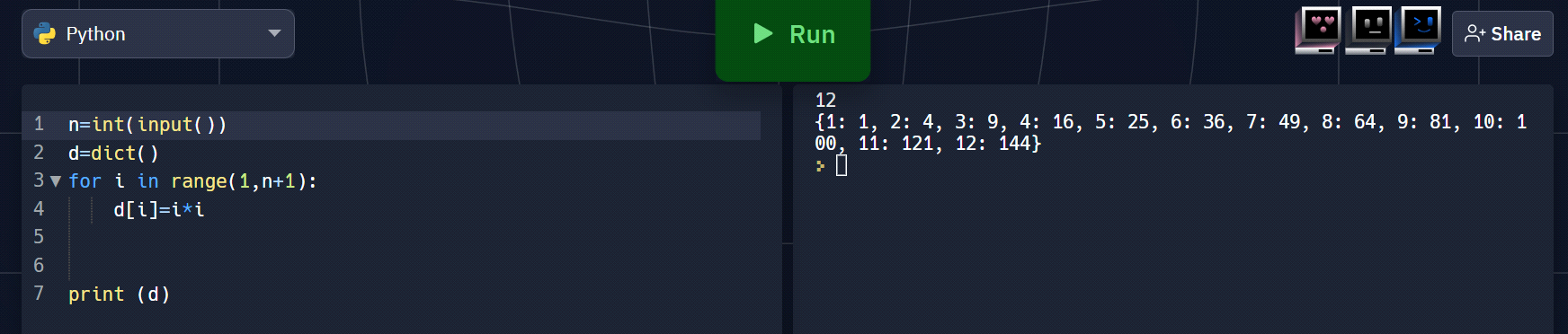
|  |
| --- |
| **Solution:** |
|  | s = "Hi there Sam!" |
|  | print(s.split()) |
|  |  |



**Question-2:**

2. Use .format() to print the following string.

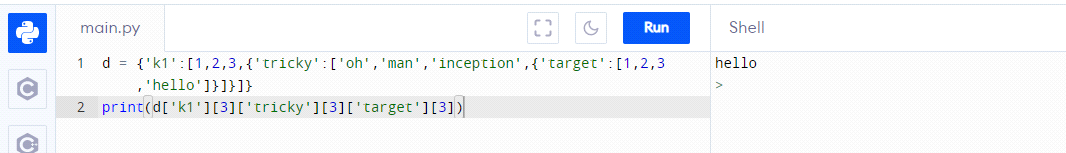
Output should be: The diameter of Earth is 12742 kilometers.



**Question-3:**

3. In this nest dictionary grab the word "hello"

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| **Solution:** | |
|  | d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]} | |
|  | print(d['k1'][3]['tricky'][3]['target'][3]) | |
|  |  | |



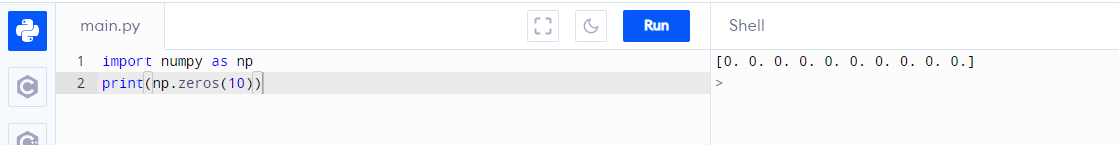
**Question-4:**

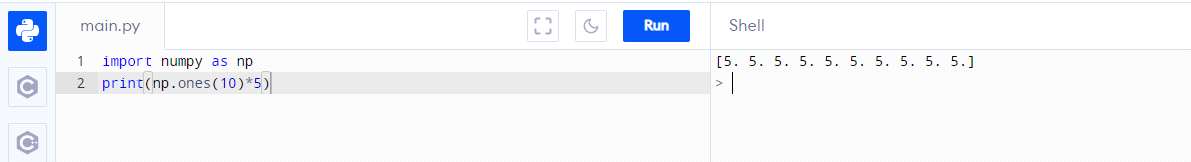
4.1 Create an array of 10 zeros?

4.2 Create an array of 10 fives?

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| **Solution:** |
|  | import numpy as np |
|  | print(np.zeros(10)) |
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| **Solution:** |
|  | import numpy as np |
|  | print(np.ones(10)\*5)) |
|  |  |

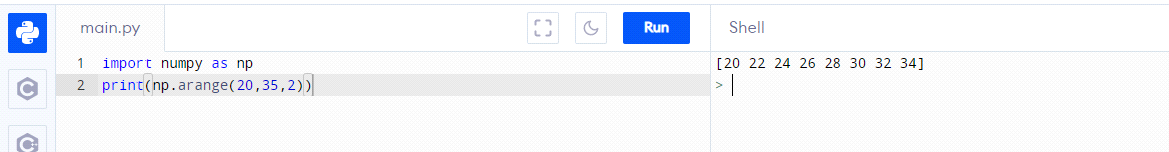




**Question-5:**

5. Create an array of all the even integers from 20 to 35

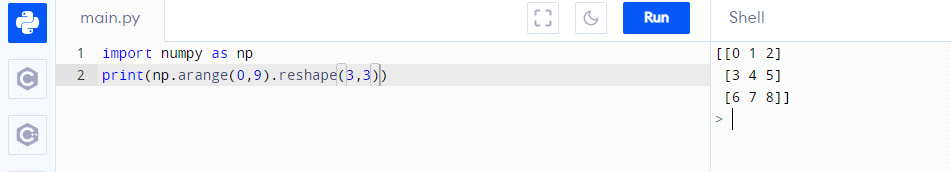
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| **Solution:** |
|  | import numpy as np |
|  | print(np.arange(20,35,2)) |
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**Question-6:**

6. Create a 3x3 matrix with values ranging from 0 to 8

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| **Solution:** |
|  | import numpy as np |
|  | print(np.arange(0,9).reshape(3,3))) |
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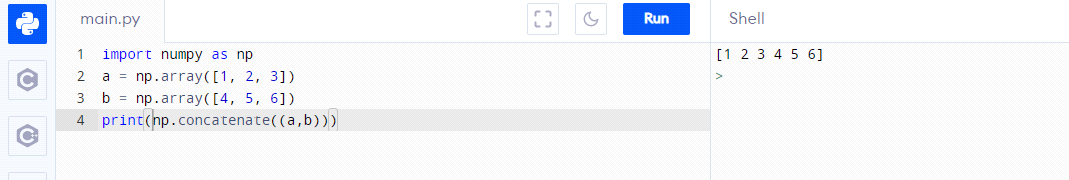


**Question-7:**

7. Concatinate a and b

a = np.array([1, 2, 3]), b = np.array([4, 5, 6])

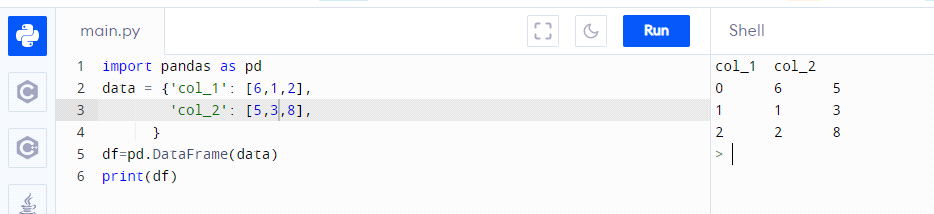
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| **Solution:** |
|  | import numpy as np |
|  | a = np.array([1, 2, 3]) |
|  | b = np.array([4, 5, 6]) |
|  | print(np.concatenate((a,b))) |
|  |  |



**Question-8:**

8. Create a dataframe with 3 rows and 2 columns

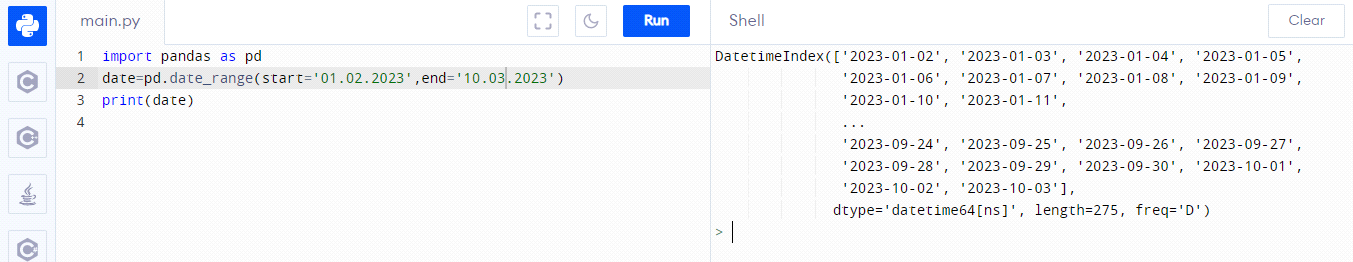
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| **Solution:** |
|  | import pandas as pd |
|  | data = {'col\_1': [6,1,2], |
|  | 'col\_2': [5,3,8], |
|  | } |
|  | df=pd.DataFrame(data) |
|  | print(df) |



**Question-9:**

9. Generate the series of dates from 1st Feb, 2023 to 10th March, 2023

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| **Solution:** |
|  | import pandas as pd |
|  | date=pd.date\_range(start='01.02.2023',end='10.03.2023') |
|  | print(date) |



**Question-10:**

**10. Create 2D list to DataFrame**

**lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]**

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| **Solution:** |
|  | import pandas as pd |
|  | lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]] |
|  | df=pd.DataFrame(lists) |
|  | print(df) |

