NPTEL (https://swayam.gov.in/explorer?ncCode=NPTEL) » Python for Data Science (course)

≡

**If already registered, click to check your payment status**

## Course outline

**About NPTEL ()**

**How does an NPTEL online course work? ()**

**Week 0 ()**

**Week 1 ()**

**Week 2 ()**

○ Jupyter setup (unit? unit=30&lesson=31)

# Week 2: Assignment 2

**The due date for submitting this assignment has passed.**
                                   **Due on 2025-02-05, 23:59 IST.**
**As per our records you have not submitted this assignment.**

1) Which of the following object does not support indexing?          **1 point**

○ tuple

○ list

○ dictionary

○ set

No, the answer is incorrect.
Score: 0

Accepted Answers:
*set*

2) How can you concatenate the strings "`data`" and "`science`" with a hyphen(-)          **2 points**
between them?

☐ "data".join("science")

☐ "-".join(["data", "science"])

☐ "data" + "-" + "science"

☐ None of the above.

No, the answer is incorrect.
Score: 0

Accepted Answers:
*"-".join(["data", "science"])*

*"data" + "-" + "science"*

3) What will be the output of the following code snippet?    *2 points*

```python
import numpy as np
a = np.array([[1, 2], [3, 4]])
b = np.array([[5, 6], [7, 8]])
c = np.dot(a, b)
print(c)
```

○ [[ 5 12]
[21 32]]

○ [[19 22]
[43 50]]

○ [[3 8]
[35 56]]

○ [[ 5 21]
[12 32]]

No, the answer is incorrect.
Score: 0
Accepted Answers:
*[[19 22]*
*[43 50]]*

4) What will be the output of the following code snippet?    *2 points*

```python
import numpy as np
a = np.arange(10)
b = a[1:5]
b[0] = 10
print(a)
```

○ [ 1 10 3 4 5 6 7 8 9 10]

○ [ 10 1 2 3 4 5 6 7 8 9]

○ [ 0 10 2 3 4 5 6 7 8 9]

○ [ 10 2 3 4 5 6 7 8 9 ]

No, the answer is incorrect.
Score: 0
Accepted Answers:
*[ 0 10 2 3 4 5 6 7 8 9]*

5) What is the output of the following code?    *2 points*

```python
s = {1, 2, 4, 5}
l = []

for i in range(len(s)):
  l +=[1+i]
print(l)
```

○ [2, 3, 4, 5]

○ [0, 1, 2, 3]

○ [1, 2, 3, 4]

○ Will throw an error: Set objects are not iterable.

No, the answer is incorrect.
Score: 0

Accepted Answers:
*[1, 2, 3, 4]*

6) What will be the output of the following code snippet?   **1 point**

```
A = {1, 'two', 3.0, 3, 27.5, 'four', 5}
B = {27.5, 10}

print(A | B)
```

○ {27.5}

○ {1, 'four ', 3.0, 3, 5, 'two ', 10, 27.5}

○ {1, 'four ', 3.0, 5, 'two ', 10, 27.5}

○ {1, 'four ', 3.0, 5, 'two ', 3}

No, the answer is incorrect.
Score: 0

Accepted Answers:
*{1, 'four ', 3.0, 5, 'two ', 10, 27.5}*

7) Let *t1* = (1, 2, "tuple", 4) and *t2* = (5, 6, 7). Which of the following will not give any   **2 points**
error after the execution?

☐ `t1.append(5)`

☐ `x = t2[t1[1]]`

☐ `t3 = t1 + t2`

☐ `t3 = (t1, t2)`

☐ `t3 = (list(t1), list(t2))`

No, the answer is incorrect.
Score: 0

Accepted Answers:
*x = t2[t1[1]]*
*t3 = t1 + t2*
*t3 = (t1, t2)*
*t3 = (list(t1), list(t2))*

8) Let d = {1 : "Pyhton", 2 : [1, 2, 3]}. Which among the following will not give the error **2 points**
after the execution?

☐ *d*[2].append(4)

☐ x = *d*[0]

☐ *d*["one"] = 1

☐ *d*.update({'one' : 2})

No, the answer is incorrect.
Score: 0
Accepted Answers:
*d[2].append(4)*
*d["one"] = 1*
*d.update({'one' : 2})*

9) Which of the following data type is immutable?    **1 point**

○ list

○ set

○ tuple

○ dictionary

No, the answer is incorrect.
Score: 0
Accepted Answers:
*tuple*

10) `student = {'name': 'Jane', 'age': 25, 'courses': ['Math',`    **2 points**
`'Statistics']}`

Which among the following will return
`{'name': 'Jane', 'age': 26, 'courses': ['Math', 'Statistics'], 'phone':`
`'123-456'}`

☐ student.update({'age' : 26})

☐ student.update({'age' : 26, 'phone': '123-456'})

☐ student['phone'] = '123-456'
student.update({'age' : 26})

☐ None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
*student.update({'age' : 26, 'phone': '123-456'})*
*student['phone'] = '123-456'*
*student.update({'age' : 26})*

11) What is the output of the following code?    **1 point**

```python
name = "Mahesh"
l =[]

for i in name:
  l.append(i.capitalize())

print(l)
```

○ ['M', 'A', 'H', 'E', 'S', 'H']

○ ['m', 'a', 'h', 'e', 's', 'h']

○ ['M', 'a', 'h', 'e', 's', 'h']

○ ['m', 'A', 'H', 'E', 'S', 'H']

12) What will be the output of the following code snippet?                    *2 points*

```python
a = np.array([range(i, i+4) for i in [1, 3, 5]])
print(a)
```

○ [[1 2 3 4 5]
[3 4 5 6 7]
[5 6 7 8 9]]

○ [[1 2 3 4]
[3 4 5 6]
[5 6 7 8]]

○ [[2 3 4]
[4 5 6]
[6 7 8]]

○ None of the above