Week 1 : Assignment 1

The due date for submitting this assignment has passed.

Due on 2025-08-06, 23:59 IST.

Assignment submitted on 2025-08-06, 21:32 IST

1) Which of the following variable names are INVALID in Python? *1 point*

- [x] 1_variable
- [ ] variable_1
- [ ] variable1
- [x] variable#

Yes, the answer is correct.
Score: 1
Accepted Answers:
1_variable
variable#

2) Which of the following operators have lower precedence than "not" in Python? *1 point*

- ( ) +
- ( ) and
- ( ) ==
- (•) |

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

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

```
a = 10
b = 5
print(a ** b % 3)
```

- ( ) 0
- ( ) 100
- (•) 1
- ( ) 2

Yes, the answer is correct.
Score: 1
Accepted Answers:
1

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

```
greetings = "Namaste"
greetings_1 = float(greetings)
print(type(greetings_1))
```

- ( ) int
- ( ) float
- ( ) str
- (•) Code will throw an error.

Yes, the answer is correct.
Score: 1
Accepted Answers:
Code will throw an error.

5) Given two variables, **j = 6** and **g = 3.3**. If both normal division and floor division operators were used to divide **j** by **g**, what would be the data type of the value obtained from the operations? *1 point*

- ( ) int, int
- (•) float, float
- ( ) float, int
- ( ) int, float

Yes, the answer is correct.
Score: 1
Accepted Answers:
float, float

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

```
greetings = "Namaste"
greetings_1 = float(greetings)
print(type(greetings_1))
```

- int
- float
- str
- Code will throw an error.

Yes, the answer is correct.
Score: 1
Accepted Answers:
Code will throw an error.

5) Given two variables, **j = 6** and **g = 3.3**. If both normal division and floor division operators were used to divide **j** by **g**, what would be the data type of the value obtained from the operations? *1 point*

- int, int
- float, float
- float, int
- int, float

Yes, the answer is correct.
Score: 1
Accepted Answers:
float, float

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

```
a = "10"
b = float(a) + 5
result = str(b) + "123"
print(type(result))
```

- <class 'float'>
- <class 'str'>
- <class 'int'>
- The code will give an error.

Yes, the answer is correct.
Score: 1
Accepted Answers:
<class 'str'>

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

```
a = 15
b = 3
c = 4
result = a + b * c // (c % b) - 5
print(result)
```

- 20
- 1
- 22
- 0

Yes, the answer is correct.
Score: 1
Accepted Answers:
22

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

```
a = 15
b = 3
c = 4
result = a + b * c // (c % b) - 5
print(result)
```

- 20
- 1
- (selected) 22
- 0

Yes, the answer is correct.
Score: 1
Accepted Answers:
22

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

```
a = 4
b = 5
a *= b * 2
print(a)
```

- 10
- 20
- 25
- (selected) 40

Yes, the answer is correct.
Score: 1
Accepted Answers:
40

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

```
a = 3
b = 5
c = (a == 3) and (b == 5) or (a != 3)
print(c)
```

- (selected) True
- False
- Error

Yes, the answer is correct.
Score: 1
Accepted Answers:
True

10) Let a = 5 (101 in binary) and b = 3 (011 in binary). What is the result of the following operation? *1 point*

```
a = 5
b = 3
print(a & b)
```

- 3
- 7
- 5
- (selected) 1

Yes, the answer is correct.
Score: 1
Accepted Answers:
1

Week 2 : Assignment 2

The due date for submitting this assignment has passed.

Due on 2025-08-06, 23:59 IST.

Assignment submitted on 2025-08-06, 22:11 IST

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

- tuple
- list
- dictionary
- set

Yes, the answer is correct.
Score: 1
Accepted Answers:
set

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

- `"data".join("science")`
- `"-".join(["data", "science"])`
- `"data" + "-" + "science"`
- None of the above.

Partially Correct.
Score: 1
Accepted Answers:
`"-".join(["data", "science"])`
`"data" + "-" + "science"`

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

```
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]]

Yes, the answer is correct.
Score: 2
Accepted Answers:
[[19 22]
[43 50]]

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

```
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*

```
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.

Yes, the answer is correct.
Score: 2
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 error after the execution? *2 points*

- t1.append(5)
- x = t2[t1[1]]
- t3 = t1 + t2
- t3 = (t1, t2)
- t3 = (list(t1), list(t2))

Yes, the answer is correct.
Score: 2

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 after the execution? *2 points*

- *d*[2].append(4)
- x = *d*[0]
- *d*["one"] = 1
- *d*.update({'one' : 2})

Yes, the answer is correct.
Score: 2

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

Yes, the answer is correct.
Score: 1

Accepted Answers:
tuple

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

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

Yes, the answer is correct.
Score: 2

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

tuple

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

Which among the following will return

`{'name': 'Jane', 'age': 26, 'courses': ['Math', 'Statistics'], 'phone': '123-456'}`

- [ ] student.update({'age' : 26})
- [x] student.update({'age' : 26, 'phone': '123-456'})
- [x] student['phone'] = '123-456'
  student.update({'age' : 26})
- [ ] None of the above

Yes, the answer is correct.
Score: 2

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*

```
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']

Yes, the answer is correct.
Score: 1

Accepted Answers:
['M', 'A', 'H', 'E', 'S', 'H']

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

```
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

Yes, the answer is correct.
Score: 2

Accepted Answers:
[[1 2 3 4]
[3 4 5 6]
[5 6 7 8]]