Started on	Thursday, 29 September 2022, 10:50 AM
State	Finished
Completed on	Thursday, 29 September 2022, 11:00 AM
Time taken	10 mins
Grade	**7.00** out of 10.00 (**70**%)

Question **1**

Incorrect

Mark 0.00 out of 3.00

A closure is...

Select one:

- a. Function code and values of its arguments.
- b. Function code together with the (runtime) values of its free variables.
- c. Function code and its address in memory.
- d. Function code together with the (runtime) values of its free and bound variables.
- e. Function code together with the (runtime) values of its bound variables. ✖

Your answer is incorrect.

The correct answer is:
Function code together with the (runtime) values of its free variables.

Question 2

Correct

Mark 7.00 out of 7.00

Select Python code snippets that print **6**.

Select one or more:

a.
```
def task(n):
    def run(x):
        return x * n
    return run

tasks = [task(n) for n in [1, 2, 3]]
print (sum([task(1) for task in tasks]))
```
✔

b.
```
def task(n):
    return (lambda x: x * n)

tasks = [task(n) for n in [1, 2, 3]]
print (sum([task(1) for task in tasks]))
```
✔

c.
```
tasks = [(lambda x: x * n) for n in [1, 2, 3]]
print (sum([task(1) for task in tasks]))
```

d.
```
tasks = [(lambda x: x * n) for n in [1, 2, 3]]
print (sum(map(lambda f: f(1), tasks)))
```

e.
```
tasks = [(lambda x, n=n: x * n) for n in [1, 2, 3]]
print (sum([task(1) for task in tasks]))
```
✔

Your answer is correct.

The correct answers are:

```
def task(n):
    def run(x):
        return x * n
    return run

tasks = [task(n) for n in [1, 2, 3]]
print (sum([task(1) for task in tasks]))
```

,

```
def task(n):
    return (lambda x: x * n)

tasks = [task(n) for n in [1, 2, 3]]
print (sum([task(1) for task in tasks]))
```

,

```
tasks = [(lambda x, n=n: x * n) for n in [1, 2, 3]]
print (sum([task(1) for task in tasks]))
```