Exercises

Mastering Python
الدرس 4#
Python's Language Basics
اساسيات لغة بايثون

By:

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Exercises

1. what is the outcome form this program
o=lambda x=1,y=2,z=3:x+y+z
print(o())
print(o(10))
print(o(10,20))

2. Write a Python function to multiply all the numbers in a list

3. Write a Python lambda function that multiplies argument a with argument b and print the result

4. Write python program using lambda, filter to return a list negative numbers (less_than_zero) using this range : number_list = range(-5, 5)

Exercises

5. what is the outcome form this program

```python
x = lambda a, b, c : a + b + c
print(x(5, 6, 2))
```

6. what is the outcome from this program

```python
x = ("Joey", "Monica", "Ross")
y = ("Chandler", "Pheobe")
z = ("David", "Rachel", "Courtney")
result = list(zip(x, y, z))
print(result)
```

7. what is the outcome from this program

```python
coin = ('Bitcoin', 'Ether', 'Ripple', 'Litecoin')
code = ('BTC', 'ETH', 'XRP', 'LTC')
d= dict(zip(coin, code))
print(d)
```

8. what is the outcome form this program

```
# function that filters vowels
def fun(variable):
    letters = ['a', 'e', 'i', 'o', 'u']
    if (variable in letters):
        return True
    else:
        return False


sequence = ['g', 'j', 'e', 'j', 'k', 'o', 'p', 'r']
filtered = list(filter(fun, sequence) )
print (filtered)
```

Exercises

9. what is the outcome form this program (input : 1 20 10)
```
x = list(map(int, input("Enter a multiple value: ").split()))
print("List of students: ", x)
```

10. what is the outcome form this program
```
def newfunc(a):
    return a*a
x = list(map(newfunc, (1,2,3,4)))
print(x)
```

11. Write a Python
```
def func(a, b):
    return a + b
a = list(map(func, [2, 4, 5], [1,2,3,2,4]))
print(a)
```

Exercises

12. what is the outcome form this program (input : 1 20 10)
```python
c = map(lambda x:x+x,filter(lambda x: (x>=3), (1,2,3,4)))
print(list(c))
```

13. what is the outcome form this program
```python
c = filter(lambda x: (x>=3),map(lambda x:x+x, (1,2,3,4)))
print(list(c))
```

14. Write a Python program to get the minimum value in the list using reduce

15. Write a Python program to convert the following list into tuples using zip
```python
numbers = [1, 2, 3]
letters = ['a', 'b', 'c']
```

End of the lesson

Thank You

Master in Software Engineering

Hussam Hourani has over 25 years of Organizations Transformation, VROs, PMO, Large Scale and Enterprise Programs Global Delivery, Leadership, Business Development and Management Consulting. His client experience is wide ranging across many sectors but focuses on Performance Enhancement, Transformation, Enterprise Program Management, Artificial Intelligence and Data Science.