

ERRORS, LAMBDA, AND LOOP EXERCISE

TASK 1: CONVERT FUNCTIONS INTO LAMBDA EXPRESSIONS

WORK WITH

1.

```
def mul(num1= 5, num2= 20, num3= 100):  
    return num1 + num2 + num3
```

2.

```
bowl = ["cherries", "orange", "apple", "melon", "figs"]  
def salad(fruit):  
    if fruit in bowl:  
        print(fruit)  
    else:  
        print("not in bowl")
```

3.

```
def inside(num):  
    if num in list(range(10)):  
        return num**2  
    else:  
        print("outside")
```

DESIRED OUTPUTS

1. 125 `mul()` parameters are left empty.
2. 'not in bowl' or 'apple'
3. 16 or "outside"

HINTS?

1. For two of the `lambda` expresions, use control flow.
2. For the first `lambda` expression, set three default values.
3. Use the `in` statement.

TASK 2: HANDLING ERRORS WITH LAMBDA AND WHILE LOOP

WORK WITH

```

while True:

    try:

        val = int(eval(input("Enter an integer: ")))

        g = lambda x: x*3 if x > 10 else "too low"

        ### CONTROL FLOW GOES HERE ###

        g(val) > 20

        #####

    except:
        continue

    finally:

```

DESIRED OUTPUTS

Enter an integer: 1
 Try again please
 End code
 Enter an integer: 10
 Try again please
 End code
 Enter an integer: 12.12345
 Lambda is 36
 Input value is 12
 End code

HINTS?

1. Use a **break** and **continue** statement.
2. Use conditional operator where $g(val) > 20$.
3. Put the completed code in a function called **error()** and run it.

TASK 3: USE FOR LOOPS WITH LAMBDA

WORK WITH

```
g = lambda x: x**2 if x > 5 in range(10) else 0
```

DESIRED OUTPUTS

Where $g(9)$: Where $g(3)$:

100	81	100	0
101	82	101	1
102	83	102	2
103	84	103	3
104	85	104	4
105	86	105	5
106	87	106	6
107	88	107	7
108	89	108	8
109	90	109	9

HINTS?

1. Use a for loop with a range 0 to 10.
2. Use print and add 100 to one of the output values.
3. Use two **+**.

TASK 4: FOR LOOP AND LIST COMPREHENSION

WORK WITH

```
critics = ("Mustafa", "Michael", "Callum", "George")

films = ["Akira", "Blade Runner 2049", "Mr. Robot", "The Ten
Commandments"]
```

DESIRED OUTPUTS

```
["Mustafa's favourite film is Akira",
"Michael's favourite film is Blade Runner 2049",
"Callum's favourite film is Mr. Robot",
"George's favourite film is The Ten Commandments"]
```

HINTS?

- 1.No hints required!