

1. How docstrings can be used to explain about the functions?
2. How to assign a default value in a function?
3. Can I have a variable having a default value as first argument?
4. Write a function to calculate sum of all numbers in a list?
Sample list = list(range(1, 11))

5. Write a function to find the maximum of 3 numbers?
6. What does the following code print?

```
add_one = lambda x: x + 1  
print(add_one(7))
```

7. What does the following code print?

```
multiply_by_two = lambda x: x * 2  
numbers = [1, 2, 3]  
doubled = map(multiply_by_two, numbers)  
doubled_list = list(doubled)  
print(doubled_list)
```

8. What does the following code print?

```
letters = ["beach", "car"]  
funified = list(map(lambda word: f"{word} is fun!", letters))  
print(funified)
```

9. What does the following code print?

```
nums = [3, 5, 16, 27]  
some_nums = list(filter(lambda num: num < 10, nums))  
print(some_nums)
```

10. What does the following code print?

```
words = ["bay", "cat", "boy", "fan"]  
b_words = list(filter(lambda word: word.startswith("b"), words))  
print(b_words)
```

11. What does the following code print?

```
nums = [4, 5, 6]  
squares = list(map(lambda num: num ** 2, nums))  
print(squares)
```

12. What does the following code print?

```
from functools import reduce
numbers = [1, 2, 3, 4]
sum = reduce(lambda x, y: x + y, numbers)
print(sum)
```

13. What does the following code print?

```
from functools import reduce
words = ["mary", "had", "a", "little", "lamb"]
biggest_word = reduce(lambda x, y: x if len(x) > len(y) else y, words)
print(biggest_word)
```

14. Write a function to print the even numbers from a given list?

Sample List : [1, 2, 3, 4, 5, 6, 7, 8, 9]

15. Can you write a function for demonstrating "*" and "**" as arguments?