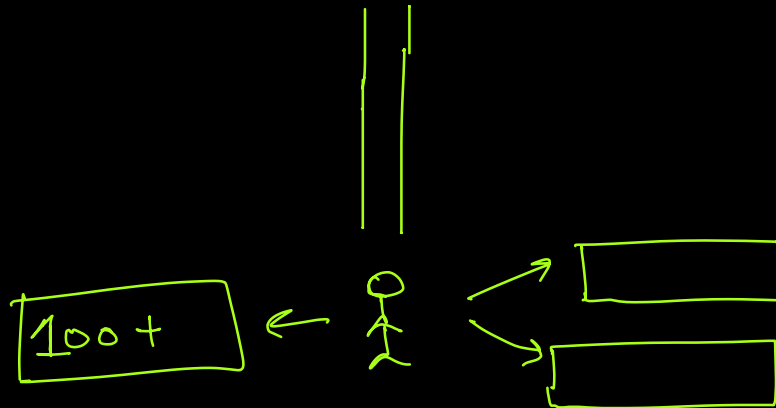


Python + Statistics

1.5 months



Python Ques (Continued)

Ques 1. Write a program to find the sum of all numbers in a list.

Ans:

```
def sum_of_numbers(numbers):  
    total = 0  
    for num in numbers:  
        total += num  
    return total
```

Ques 2. Write a program to find the maximum and minimum values in a list.

Ans:

```
def find_max_min(numbers):  
    max_value = numbers[0]  
    min_value = numbers[0]  
    for num in numbers:  
        if num > max_value:  
            max_value = num  
        if num < min_value:  
            min_value = num  
    return max_value, min_value
```

Ques 3. Write a program to find the average of all numbers in a list.

Ans:

```
def average_of_numbers(numbers):  
    total = 0  
    count = 0  
    for num in numbers:  
        total += num  
        count += 1  
    return total / count
```

Ques 4. Write a program to find the product of all numbers in a list.

Ans:

```
def product_of_numbers(numbers):  
    product = 1  
    for num in numbers:  
        product *= num  
    return product
```

Ques 5. Write a program to find the sum of all even numbers in a list.

Ans:

```
def sum_of_even_numbers(numbers):  
    total = 0  
    for num in numbers:  
        if num % 2 == 0:  
            total += num  
    return total
```

Ques 6. Write a program to find the sum of all odd numbers in a list.

Ans:

```
def sum_of_odd_numbers(numbers):  
    total = 0  
    for num in numbers:  
        if num % 2 != 0:  
            total += num  
    return total
```

Ques 7. Write a program to find the sum of all prime numbers in a list.

Ans:

```
def is_prime(n):  
    if n < 2:  
        return False  
    for i in range(2, int(n**0.5) + 1):  
        if n % i == 0:  
            return False  
    return True
```

Ques 8. Write a program to find the sum of all composite numbers in a list.

Ans:

```
def is_composite(n):  
    if n < 2:  
        return False  
    for i in range(2, int(n**0.5) + 1):  
        if n % i == 0:  
            return True  
    return False
```

Statistics / Data Science

1. Mean, Var, S.d

2. Cor. corr

3. Hypothesis testing \Rightarrow Z-test
t-test p-value
Chi
Anova

4. Distribution

5. Central Limit Theorem

Probability

6. Outliers

7. Missing value

8. Stand. Norm.

9. Feature engineering

10. EDA