UST Python Fresher Technical Interview - Common Coding Questions

1. Reverse a String

```python
def reverse_string(s):
    return s[::-1]
```

2. Palindrome Check

```python
def is_palindrome(s):
    return s == s[::-1]
```

3. Count Vowels in a String

```python
def count_vowels(s):
    vowels = "aeiouAEIOU"
    return sum(1 for char in s if char in vowels)
```

4. Remove Duplicates from List

```python
def remove_duplicates(lst):
    return list(set(lst))
```

5. Fibonacci Series

```python
def fibonacci(n):
    a, b = 0, 1
    for _ in range(n):
        print(a, end=" ")
        a, b = b, a + b
```

6. Factorial (Recursive)

```python
def factorial(n):
    if n == 0:
        return 1
    else:
        return n * factorial(n - 1)
```

7. Prime Number Check

```python
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
```

8. Sum of Digits

```python
def sum_of_digits(n):
    return sum(int(digit) for digit in str(n))
```

9. Sort a List Without Using sort()

```python
def sort_list(lst):
    for i in range(len(lst)):
        for j in range(i+1, len(lst)):
            if lst[i] > lst[j]:
                lst[i], lst[j] = lst[j], lst[i]
    return lst
```

10. Maximum Frequency Character

```python
from collections import Counter

def max_freq_char(s):
    count = Counter(s)
    return count.most_common(1)[0][0]
```