Top Python Coding Questions

Beginner

EVEN OR ODD CHECKER

```python
# Check if a number is even or odd
num = int(input("Enter a number: "))
print("Even" if num % 2 == 0 else "Odd")
```

REVERSE A STRING

```python
# Reverse a string using slicing
s = "Python"
print(s[::-1])   # Output: "nohtyP"
```

FIBONACCI SERIES GENERATOR

```python
# Generate Fibonacci series up to n terms
n = int(input("Enter the number of terms: "))
a, b = 0, 1
for _ in range(n):
    print(a, end=" ")
    a, b = b, a + b
```

CHECK LEAP YEAR

```python
# Check if a given year is a leap year
year = int(input("Enter a year: "))
if (year % 4==0 and year % 100!=0) or (year % 400==0):
    print("Leap Year")
else:
    print("Not a Leap Year")
```

PALINDROME CHECKER

```python
# Function to check if a string is a palindrome
def is_palindrome(s):
    return s.lower() == s.lower()[::-1]
print(is_palindrome("madam")) # Output: True
```

Basic

●●●   LIST COMPREHENSION CHALLENGE

```python
# Generate squares using list comprehension
squares = [x**2 for x in range(1, 11)]
print(squares) # Output: [1, 4, 9, 16, 25, 36, 49, 64, 81, 100]
```

●●●   ARMSTRONG NUMBER CHECKER

```python
def is_armstrong(n):
    num_str = str(n)
    power = len(num_str)
    return n == sum(int(digit) ** power for digit in num_str)
print(is_armstrong(153)) # Output: True
```

●●●   LAMBDA FUNCTION USAGE

```python
# Lambda function to compute square of a number
square = lambda x: x ** 2
print(square(5)) # Output: 25
```

●●●   FIZZBUZZ IMPLEMENTATION

```python
# Classic FizzBuzz problem
for i in range(1, 101):
    if i % 3 == 0 and i % 5 == 0:
        print("FizzBuzz")
    elif i % 3 == 0:
        print("Fizz")
    elif i % 5 == 0:
        print("Buzz")
    else:
        print(i)
```

●●●   MAP FUNCTION IMPLEMENTATION

```python
# Using map() to double values in a list
nums = [1, 2, 3, 4]
doubled = list(map(lambda x: x * 2, nums))
print(doubled) # Output: [2, 4, 6, 8]
```