```
def longest_consecutive_sequence(nums):
    if not nums:
       return 0
    num_set = set(nums)
    longest_sequence = 0
    for num in num_set:
       # Check if the current number is the start of a sequence
       if num - 1 not in num_set:
           current_num = num
           current_sequence = 1
           # Expand the sequence to the right
           while current_num + 1 in num_set:
               current_num += 1
               current_sequence += 1
           longest_sequence = max(longest_sequence, current_sequence)
    return longest_sequence
# Example usage:
nums = [100, 4, 200, 1, 3, 2,6,7,8,5,9]
result = longest_consecutive_sequence(nums)
print(result)
```

https://colab.research.google.com/drive/1bFeBrYDZ\_wtgUrTKK1dV3cETgb2ivpP1#scrollTo=GTnKnXpF5syO&printMode=true