AI ASISTED CODING:

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Question1:

a python code to calculate the sum of odd and even number in a given list using github copilot along with VS code. Use zero shot prompting.

Input:

Output:

```python
def sum_even_odd(numbers):
    even_sum = 0
    odd_sum = 0
    for num in numbers:
        if num % 2 == 0:
            even_sum += num
        else:
            odd_sum += num
    return even_sum, odd_sum

# Example usage
nums = [1, 2, 3, 4, 5, 6, 7]
even, odd = sum_even_odd(nums)
print("Sum of even numbers:", even)
print("Sum of odd numbers:", odd)
```

```
Sum of even numbers: 12
Sum of odd numbers: 16
```

Questions2:

write a python code for given a list of integers, remove duplicates and print the sorted result. Github copilot along with VS code. using one shot prompting.

```python
def remove_duplicates_and_sort(numbers):
    return sorted(set(numbers))


# Example usage
nums = [4, 2, 7, 2, 4, 9, 1]
result = remove_duplicates_and_sort(nums)
print("Sorted list without duplicates:", result)
```

Output:

```
Sorted list without duplicates: [1, 2, 4, 7, 9]
```

Question3:

write a python function that converts the temperature between celsius, fahrenheit, and kelvin based on user choice. use the cursor AI tool. use few shot prompting.

Input:

```python
def convert_temperature(value, from_unit, to_unit):
    if from_unit == to_unit:
        return value

    # Convert input to Celsius
    if from_unit == 'F':
        value = (value - 32) * 5/9
    elif from_unit == 'K':
        value = value - 273.15

    # Convert Celsius to target unit
    if to_unit == 'F':
        return (value * 9/5) + 32
    elif to_unit == 'K':
        return value + 273.15
    else:
        return value

# User input
temp = float(input("Enter temperature: "))
from_unit = input("Convert from (C/F/K): ").upper()
to_unit = input("Convert to (C/F/K): ").upper()

converted = convert_temperature(temp, from_unit, to_unit)
print(f"{temp}°{from_unit} is {converted:.2f}°{to_unit}")
```

Output:

```
Enter temperature: 100
Convert from (C/F/K): C
Convert to (C/F/K): F
```

```
100.0°C is 212.00°F
```

Question4:

 write a python function to remove punctuation, convert to lowercase, and remove stop wards from a given text. use the cursor AI tool. use zero shot prompting

input:

```python
import string
from nltk.corpus import stopwords
from nltk.tokenize import word_tokenize

def clean_text(text):
    # Convert to lowercase
    text = text.lower()

    # Remove punctuation
    text = text.translate(str.maketrans('', '', string.punctuation))

    # Tokenize the text
    words = word_tokenize(text)

    # Remove stop words
    stop_words = set(stopwords.words('english'))
    filtered_words = [word for word in words if word not in stop_words]

    return ' '.join(filtered_words)
```

Output:

```
hello simple example show works
```