```python
# -*- coding: utf-8 -*-
"""PP2.ipynb

Automatically generated by Colaboratory.

Original file is located at
    https://colab.research.google.com/drive/1UdXlSQeBwZek_FgJ8nzLgpIQyEPLTvha
"""

import math

def radians_to_degrees(radians):
    # Convert radians to degrees using the formula
    degrees = radians * (180 / math.pi)
    return degrees

# Example usage:
radians_input = float(input("Enter the angle in radians: "))
degrees_output = radians_to_degrees(radians_input)
print("Angle in degrees:", degrees_output)

def sort_list(numbers, order):
    if order == "asc":
        return sorted(numbers)
    elif order == "desc":
        return sorted(numbers, reverse=True)
    elif order == "none":
        return numbers
    else:
        print("Invalid sorting order. Please choose from 'asc', 'desc', or 'none'.")

# Example usage:
numbers = [4, 2, 7, 1, 5, 3]
sorting_order = input("Enter sorting order ('asc', 'desc', or 'none'): ")

sorted_numbers = sort_list(numbers, sorting_order)
print("Sorted numbers:", sorted_numbers)

def count_vowels(word):
    # Define a set of vowels
    vowels = {'a', 'e', 'i', 'o', 'u'}

    # Convert the word to lowercase to make the comparison case-insensitive
    word = word.lower()

    # Initialize a count variable to store the count of vowels
    count = 0

    # Iterate through each character in the word
    for char in word:
        # If the character is a vowel, increment the count
        if char in vowels:
            count += 1

    return count

# Example usage:
word = input("Enter a word: ")

vowel_count = count_vowels(word)
print("Number of vowels in the word:", vowel_count)

def hide_credit_card_number(credit_card_number):
    # Determine the length of the credit card number
    num_digits = len(credit_card_number)

    # If the length is less than or equal to 4, return the credit card number as it is
    if num_digits <= 4:
        return credit_card_number

    # Otherwise, hide all characters except the last four with asterisks
    hidden_part = '*' * (num_digits - 4)

    # Concatenate the hidden part with the last four digits
    return hidden_part + credit_card_number[-4:]
```

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# Example usage:
credit_card_number = input("Enter the credit card number: ")

hidden_credit_card = hide_credit_card_number(credit_card_number)
print("Hidden credit card number:", hidden_credit_card)

def equal_x_and_o(string):
    # Count the occurrences of 'X' and 'O' in the string
    count_x = string.lower().count('x')
    count_o = string.lower().count('o')

    # Check if the counts are equal or both are zero
    return count_x == count_o

# Example usage:
input_string = input("Enter a string: ")

result = equal_x_and_o(input_string)
print("Are the counts of Xs and Os equal?", result)

def calculator(num1, operator, num2):
    # Perform the operation based on the operator
    if operator == '+':
        return num1 + num2
    elif operator == '-':
        return num1 - num2
    elif operator == '/':
        # Check for division by zero
        if num2 == 0:
            return "Error: Division by zero"
        else:
            return num1 / num2
    elif operator == '*':
        return num1 * num2
    else:
        return "Error: Invalid operator"

# Example usage:
num1 = int(input("Enter

def apply_discount(full_price, discount_percentage):
    discount_amount = full_price * (discount_percentage / 100)
    discounted_price = full_price - discount_amount
    return discounted_price

# Example usage:
price = 100
discount = 20
final_price = apply_discount(price, discount)
print("Final Price after", discount, "% discount:", final_price)

def extract_integers(input_list):
    return [x for x in input_list if isinstance(x, int)]

# Example usage:
mixed_list = [1, 'apple', 2, 'banana', 3, 'cherry', 4]
integers_only = extract_integers(mixed_list)
print("Integers only:", integers_only)
print("integera on")
```