Functions Challenge 31: The Python Dice App

Description:
You are responsible for writing a program that will roll a given number of dice of any number of sides and sum the total. Your program will continue to run until the user desires to quit.

Step By Step Guide:
Defining your functions:
- Define a function dice_sides() which takes zero parameters.
  - Get user input for how many sides their dice should have.
  - Return this value.

- Define a function dice_number() which takes zero parameters.
  - Get user input for how many dice they would like to roll.
  - Return this value.

- Define a function roll_dice() which takes in two parameters, the number of sides on the dice, and the number of dice to roll.
  - This function should simulate rolling the dice and store the values in a list.
  - Define a blank list called dice.
  - Print a message informing how many n sided dice the user rolled.
  - Roll the correct number of dice.
  - To roll a die, create a random integer from 1 up to the number of sides on the dice.
    - Type import random as the first line of code in your program.
  - Append this die value to your list.
  - When you have rolled all of the dice, return the list.

- Define a function sum_dice() which takes in one parameter, a list holding all the dice values.
  - This function should sum all the dice in the list.
  - Print the value of the sum.
  - There is no return value for this function.

- Define a function roll_again() which takes zero parameters.
  - Get user input for if they would like to roll again.
  - This can be a y or n value.
  - Return an appropriate Boolean (True or False) based on their response.
  - Use this return value to control a while loop running the app.

Your main code:
- Print a welcome message.
- Create an active flag variable and set it to True.
- Use this flag to control a while loop.

- Run your program to simulate a dice application. Your program should do the following:
  - Create the desired dice by calling the dice_sides() and dice_number() functions.
  - Roll the dice by calling the roll_dice() function.
  - Sum the dice by calling the sum_dice() function.
  - Ask the user if they would like to continue by calling the roll_again() function.
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- When the user wants to stop the program print a goodbye message.

- Use at least 2 comments to describe sections of your code.
- "Chunk" your code so that is readable.
- Use appropriate and informative variable names.
- Format your output as below.

Example Output :
Welcome to the Python Dice App

How many sides would you like on your dice: 6
How many dice would you like to roll: 4

You rolled 4 6 sided dice.

-----Results are as followed-----
        3
        5
        2
        4
The total value of your roll is 14.

Would you like to roll again (y/n): y

How many sides would you like on your dice: 20
How many dice would you like to roll: 5

You rolled 5 20 sided dice.

-----Results are as followed-----
        20
        7
        16
        20
        13
The total value of your roll is 76.

Would you like to roll again (y/n): n

Thank you for using the Python Dice App.