DCI Digital Career Institute

Python Course

Task: Stone Game

Required Time: 30 minutes

You are assigned to create a Python program for a two-player game called the "Stone Game." Follow the steps below to complete the task:

1- Ask the user to input the total number of stones in the pile.

2- Ask the user to input the maximum number of stones that can be taken at once.

3- Prompt the user to enter the names of the two players.

4- Ask the user to input the player number who will start the game (1 for Player 1, 2 for Player 2).

5- Implement a game loop that continues as long as there are stones left in the pile:

   a. Print the current number of stones in the pile.

   b. Prompt the current player (whose turn it is) to enter a number of stones they want to take (between 1 and the maximum allowed).

   c. Check if the input is valid and subtract the chosen number of stones from the pile.

   d. If the pile is empty, break the loop.

6- Determine the winner based on the player who removes the last stone from the pile.

7- Display the name of the winning player.

Expected/Sample Output:

Here is an example of the expected output for this exercise:

```
Welcome to the Stone Game!
Enter the total number of stones in the pile: 15
Enter the maximum number of stones that can be taken at once: 3
Enter the name of Player 1: Alice
Enter the name of Player 2: Bob
Enter the player number who will start the game (1 for Alice, 2 for Bob): 1
Game Start!
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Current stone count: 15
Alice's turn. Enter a number of stones to take (1-3): 2
Current stone count: 13
Bob's turn. Enter a number of stones to take (1-3): 3
Current stone count: 10
Alice's turn. Enter a number of stones to take (1-3): 1
Current stone count: 9
Bob's turn. Enter a number of stones to take (1-3): 4
Invalid input. Please enter a valid number.
Bob's turn. Enter a number of stones to take (1-3): 3
Current stone count: 6
Alice's turn. Enter a number of stones to take (1-3): 2
Current stone count: 4
Bob's turn. Enter a number of stones to take (1-3): 2
Current stone count: 2
Alice's turn. Enter a number of stones to take (1-3): 2
Alice wins the game!
```