

```

def main():
    print("Welcome To The Circuit Identifier")
    print("Please Answer the Following Questions and choose the best number according to your observation")

    def get_user_choice(prompt, options):
        while True:
            try:
                choice = int(input(prompt))
                if choice in options:
                    return choice
            except ValueError:
                print("Please enter a valid number.")

    # Question 1
    print("A. How are the components connected?")
    print("1) End-to-end nodes via straight path")
    print("2) Across common points, providing multiple paths")
    user_choice1 = get_user_choice("Enter your choice (1 or 2): ", [1, 2])

    # Question 2
    print("B. Does the current have only one path to flow through all components?")
    print("1) Yes, only one path")
    print("2) No, multiple paths")
    user_choice2 = get_user_choice("Enter your choice (1 or 2): ", [1, 2])

    # Question 3
    print("C. If one component fails, does the entire circuit stop functioning?")
    print("1) Yes, the entire circuit stops")
    print("2) No, other paths still function")
    user_choice3 = get_user_choice("Enter your choice (1 or 2): ", [1, 2])

    # Analyzing and interpreting the user's input
    if user_choice1 == 1 and user_choice2 == 1 and user_choice3 == 1:
        circuit_type = "Series Circuit"
    elif user_choice1 == 2 and user_choice2 == 2 and user_choice3 == 2:
        circuit_type = "Parallel Circuit"
    else:
        circuit_type = "undetermined based on your choices. Please observe circuits properly."

    # Printing User Output based on given choices
    print(f"\nThe circuit is a {circuit_type}.")

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print("Thank you for using the Circuit Identifier. Have a great day!")
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# Call the main function to run the program
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if __name__ == "__main__":
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    main()
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main.py +
1 def main():
2     print("Welcome To The Circuit Identifier")
3     print("Please Answer the Following Questions and choose the best number according to your observation")
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5     def get_user_choice(prompt, options):
6         while True:
7             try:
8                 choice = int(input(prompt))
9                 if choice in options:
10                     return choice
11             else:
12                 print(f"Invalid choice. Please choose {options}.")
13         except ValueError:
14             print("Please enter a valid number.")
15
16     # Question 1
17     print("A. How are the components connected?")
18     print("1) End-to-end nodes via straight path")
19     print("2) Across common points, providing multiple paths")
20     user_choice1 = get_user_choice("Enter your choice (1 or 2): ", [1, 2])
21
22     # Question 2
23     print("B. Does the current have only one path to flow through all components?")
24     print("1) Yes, only one path")
25     print("2) No, multiple paths")
26     user_choice2 = get_user_choice("Enter your choice (1 or 2): ", [1, 2])
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28     # Question 3
29     print("C. If one component fails, does the entire circuit stop functioning?")
30     print("1) Yes, the entire circuit stops")
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34     # Analyzing and interpreting the user's input
35     if user_choice1 == 1 and user_choice2 == 1 and user_choice3 == 1:
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39     else:
40         circuit_type = "undetermined based on your choices. Please observe circuits properly."
41
42     # Printing User Output based on given choices
43     print(f"\nThe circuit is a {circuit_type}.")
44     print("Thank you for using the Circuit Identifier. Have a great day!")
45
46     # Call the main function to run the program
47 if __name__ == "__main__":
48     main()
49
50
```