

Code for: Three-Level Password System Using Python

```
import time

# Function for Level 1 Authentication
def level_one():
    password_level_1 = "sanjivani@123" # First level password
    attempts = 3
    while attempts > 0:
        entered_password = input("Enter the password for Level 1: ")
        if entered_password == password_level_1:
            print("Level 1 Authentication Successful!\n")
            return True
        else:
            attempts -= 1
            print(f"Incorrect password. You have {attempts} attempts remaining.\n")
            time.sleep(1)
    print("Level 1 Authentication Failed. Exiting.\n")
    return False

# Function for Level 2 Authentication
def level_two():
    password_level_2 = "sanjivani@456" # Second level password
    attempts = 3
    while attempts > 0:
        entered_password = input("Enter the password for Level 2: ")
        if entered_password == password_level_2:
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    print("Level 2 Authentication Successful!\n")
    return True
else:
    attempts -= 1
    print(f"Incorrect password. You have {attempts} attempts remaining.\n")
    time.sleep(1)
print("Level 2 Authentication Failed. Exiting.\n")
return False
```

Function for Level 3 Authentication

```
def level_three():
    password_level_3 = "sanjivani@789" # Third level password
    attempts = 3
    while attempts > 0:
        entered_password = input("Enter the password for Level 3: ")
        if entered_password == password_level_3:
            print("Level 3 Authentication Successful! Access Granted.\n")
            return True
        else:
            attempts -= 1
            print(f"Incorrect password. You have {attempts} attempts remaining.\n")
            time.sleep(1)
    print("Level 3 Authentication Failed. Exiting.\n")
    return False
```

Main function to handle all three levels of authentication

```
def main():
    print("Welcome to the Three-Level Password System.\n")
```

```
time.sleep(1)

# First level of authentication
if not level_one():
    return # Exits if Level 1 fails

# Second level of authentication
if not level_two():
    return # Exits if Level 2 fails

# Third level of authentication
if not level_three():
    return # Exits if Level 3 fails

print("Congratulations! You've successfully passed all three levels.")

# Run the authentication system
if __name__ == "__main__":
    main()
```

Output:

Welcome to the Three-Level Password System.

Enter the password for Level 1: sanjivani@123

Level 1 Authentication Successful!

Enter the password for Level 2: sanjivani@456

Level 2 Authentication Successful!

Enter the password for Level 3: sanjivani@789

Level 3 Authentication Successful! Access Granted.

Congratulations! You've successfully passed all three levels.

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