CODE AND RESULT:

```
import time
import datetime

print("====================================")
print("        SIMPLE ALARM CLOCK")
print(" Using Conditional Statements & Loops")
print("====================================")

# Set alarm time
alarm_time = input("Enter alarm time (HH:MM:SS) : ")

print("\nAlarm set for", alarm_time)
print("Waiting for alarm...\n")

# Infinite loop to check time
while True:
    # Get current time
    current_time = datetime.datetime.now().strftime("%H:%M:%S")

    # Display current time (optional)
    print("Current Time:", current_time, end="\r")

    # Check if alarm time matches
    if current_time == alarm_time:
        print("\nAlarm Time Reached!")
        print("Alarm Ringing....")
```

```
        # Alarm sound using loop
        for i in range(5):
            print("\a")     # Beep sound
            time.sleep(1)

        print("Alarm Stopped.")
        break  # Exit the loop once alarm is triggered

    # Wait for 1 second before checking again
    time.sleep(1)
```

RESULT:

```
time.sleep(1)
```

```
=====================================
        SIMPLE ALARM CLOCK
 Using Conditional Statements & Loops
=====================================
Enter alarm time (HH:MM:SS) :  14:26:00

Alarm set for 14:26:00
Waiting for alarm...

Current Time: 14:26:00
Alarm Time Reached!
Alarm Ringing....
□
□
□
□
□
Alarm Stopped.
```