FUNCTION FOR TEMPERTAURE MONITOR AND PROVIDE ALERT

```
import random
import time

def monitor_temperature(lower_limit, upper_limit, interval=1):
    try:
        while True:
            temperature = random.uniform(lower_limit - 5, upper_limit + 5)  # Simulate temperature readings

            print(f"Current Temperature: {temperature:.2f} °C")

            if temperature < lower_limit:
                print(f"ALERT: Temperature below lower limit ({lower_limit} °C)!")
            elif temperature > upper_limit:
                print(f"ALERT: Temperature above upper limit ({upper_limit} °C)!")

            time.sleep(interval)

    except KeyboardInterrupt:
        print("\nTemperature monitoring stopped.")

if __name__ == "__main__":
    try:
        lower = float(input("Enter lower temperature limit (°C): "))
```

```
    upper = float(input("Enter upper temperature limit (°C): "))
    interval = float(input("Enter monitoring interval (seconds): "))

    if lower >= upper:
        print("Error: Lower limit must be less than upper limit.")
    else:
        monitor_temperature(lower, upper, interval)

except ValueError:
    print("Invalid input. Please enter numeric values.")
```