

PROJECT TITLE: Real-Time River Water Quality Monitoring and Control System

TEAM ID: PNT2022TMID05726

Code:

```
# import the random and time library in python script.
```

```
import random
```

```
import time
```

```
# iterate the random values of Temperature and humidity within the specified range.
```

```
while True:
```

```
    temperature = random.randint(32, 212)
```

```
    humidity = random.randint(0, 100)
```

```
    #print the values of Temperature and humidity.
```

```
    print("Temperature is : "+str(temperature)+"°F")
```

```
    print("Temperature in celsius : "+str(((temperature-32)*5)//9)+"°C")
```

```
    print("The Humidity is : "+str(humidity)+"%")
```

```
    # check if the temperature values are higher than 100°F.
```

```
    if (temperature >= 100):
```

```
        print("High Temperature Alert : "+str(temperature)+"°F")
```

```
        time.sleep(10)
```

```
# import the random and time library in python script.
import random
import time

# iterate the random values of Temperature and humidity within the specified range.
while True:
    temperature = random.randint(32, 212)
    humidity = random.randint(0, 100)
    #print the values of Temperature and humidity.
    print("Temperature is : "+str(temperature)+"°F")
    print("Temperature in celsius : "+str(((temperature-32)*5)//9)+"°C")
    print("The Humidity is : "+str(humidity)+"%")
    # check if the temperature values are higher than 100°F.
    if (temperature >= 100):
        print("High Temperature Alert : "+str(temperature)+"°F")
        time.sleep(10)
```

```
Temperature is : 55°F
Temperature in celsius : 12°C
The Humidity is : 95%
Temperature is : 135°F
Temperature in celsius : 57°C
The Humidity is : 44%
High Temperature Alert : 135°F
Temperature is : 212°F
Temperature in celsius : 100°C
The Humidity is : 78%
High Temperature Alert : 212°F
Temperature is : 110°F
Temperature in celsius : 43°C
The Humidity is : 60%
High Temperature Alert : 110°F
```