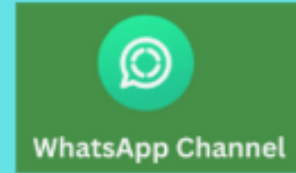# 1. Your EC2 CPU utilization crossed 80%. How would you set up a notification?

Answer:
I'd create a **CloudWatch Alarm** based on the EC2's CPU metric. Here's what I'd do:
- Go to CloudWatch → Alarms → Create Alarm
- Choose the **CPUUtilization metric** for that EC2 instance
- Set the threshold to **> 80% for 2 consecutive periods of 5 minutes** (or 1 minute if detailed monitoring is enabled)
- Then **attach an SNS topic** (Simple Notification Service)
- Subscribe an email/Slack/Lambda to the SNS topic

Example:
In one project, we had a backend API server under occasional load spikes. I set up a CloudWatch alarm that notified the on-call DevOps email when CPU crossed 80% — that helped us detect when autoscaling was needed.

If an EC2 instance has **basic monitoring** enabled, what is the minimum period you can set for the CPU alarm?
A) 1 minute
B) 5 minutes
C) 30 seconds
D) Depends on EC2 size

B) 5 minutes ✅

A CloudWatch alarm on `CPUUtilization > 80%` for **2 consecutive 5-minute periods** will trigger after:
A) Exactly 5 minutes of high CPU
B) Exactly 10 minutes of high CPU
C) 80% CPU at any moment
D) Depends on CloudWatch evaluation delay

B) Exactly 10 minutes of high CPU ✅

*(It's **2 periods × 5 minutes** before state changes.)*

Which statement about CloudWatch CPU alarms is **false**?
A) The metric name is case-sensitive (`CPUUtilization`).
B) An alarm can trigger an SNS notification.
C) You must install the CloudWatch agent to get CPU metrics.
D) Alarm states can be OK, ALARM, or INSUFFICIENT_DATA.

C) You must install the CloudWatch agent to get CPU metrics. ✅

You set a CPU alarm at **80%** for a burstable `t2.micro`. The CPU spikes to 90% for 30 seconds, then drops to 20%. What happens?   (AWS CloudWatch)
A) Alarm triggers immediately
B) Alarm triggers after 2 periods
C) Alarm never triggers
D) Alarm triggers only if credit balance is low

C) Alarm never triggers ✅