

KUBERNETES FROM ZERO · FOUNDATIONS 7 OF 12 · LESSON 7 · LESSON KIT · HOMEWORK

Kubernetes from Zero, part 7: Deployments and ReplicaSets

Exercises drawn only from the lesson: recall, run this and explain, predict the outcome.

Every command ran on a kind v0.33.0 cluster (node v1.37.0, kubectl v1.37.2) on 10 Nov 2026. Cluster: kind, from part 3.

Use the kind cluster from part 3 and the namespace `k8s-from-zero`, with the context namespace set as in part 6. The lesson does not print a cluster name. Answers are in the separate answer key.

Recall

Answer from memory, then check the lesson.

1. What does a Deployment own, and what does each of those keep?

2. Which change starts a rollout, and which change does not?

3. What do `maxSurge` and `maxUnavailable` default to, and what does `strategy.type: Recreate` do?

4. What do `progressDeadlineSeconds` and `revisionHistoryLimit` default to?

Run this and explain

Run each command, then answer.

5. Draft a Deployment with the dry-run command in the cheat sheet, apply it, and run `kubectl rollout status deployment/web --timeout=90s`. What exit code means the rollout finished?

6. Run `kubectl get deploy,rs,pods`. What do the names share?

SCAN FOR THE LESSON

Lesson: **Kubernetes from Zero, part 7: Deployments and ReplicaSets**

https://aitamer.news/posts/k8s-from-zero-07-deployments-and-replicasets/?utm_source=lessonkit&utm_medium=pdf&utm_campaign=k8s-07&utm_content=homework

NEXT IN THE SERIES **Next: Lesson 8, Services**. Kubernetes from Zero, part 8, Services. Lesson page

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7 Run `kubectl rollout undo deployment/web`. What does the lesson say this creates?

Predict the outcome

Write your prediction first. Then check the answer key.

8 Apply fails with `selector` does not match template `labels`. What must be true of the labels?

9 Apply fails with `spec.selector: Invalid value: ... field is immutable`. What are the two ways out in the lesson?

10 You `kubectl scale`, then the next deploy puts the old count back. Why?

11 `rollout status` waits forever or reports `exceeded its progress deadline`. What does the lesson tell you to read, and what keeps serving?

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