How to create a Lambda function in Learner Lab.

Step 1: Create a Lambda Function

1. Open **AWS Console → Lambda → Functions → Create function**.
2. Choose **"Author from scratch"**.
3. Give your function a **name** (e.g., `CheckEC2Tags`).
4. **Runtime:** Select Python 3.x.
5. **Architecture:** Choose **x86_64** (default).
6. **Execution Role:**
    a. In Learner Lab, select **"Use existing role" → LabRole**.
    b. You **cannot create a new IAM role** in Learner Lab.
7. Click **Create function**.

Step 2: Add Your Lambda Logic

- Add your logic to check tags, or any simulation of AWS resources.
- Remember: In Learner Lab, **you cannot access real EC2 instances or create IAM roles**, so the Lambda should **simulate resource checks**.

Step 3: Create a Test Event

1. Go to **"Test" → Configure test event**.
2. Choose a template or **create a new event** with your test data (simulated tags).
3. Save the event with a descriptive name (e.g., `TestEvent_AllTags`).

Step 4: Run the Lambda Test

- Click **Test**.
- Observe the output:
  - **COMPLIANT** → All required tags present
  - **NON_COMPLIANT** → Some tags missing
- Modify the event to test **different scenarios** (missing tags, extra tags).

Step 5: Optional – Multiple Tests

- Create multiple test events to simulate various resources.
- Test **edge cases** like no tags at all, partial tags, or all tags present.

Step 6: Deployment

- In Learner Lab, deployment is **simply saving the Lambda**.
- No real deployment is needed for student exercises.
- Your Lambda can now be **executed anytime via test events**.

Tips / Notes

- **LabRole** is the only role you can use.
- **Do not try to create new roles or access SSO** — Learner Lab blocks it.
- **Simulate resources in events** to avoid IAM permission errors.
- Document your Lambda's **COMPLIANT / NON_COMPLIANT logic** for lab reports.