

Q6 : Enable Multi-Factor Authentication (MFA) for the IAM user admin-user.

1. Create an IAM User (admin-user)

1. **Log in** to the AWS Management Console.
2. Navigate to **IAM (Identity and Access Management)**.
3. Click **Users > Add Users**.
4. Enter **User name**: admin-user.

2. Enable Multi-Factor Authentication (MFA) for admin-user

1. Go to **IAM > Users > Click admin-user**.
2. Click on the **Security credentials** tab.
3. In the **Multi-Factor Authentication (MFA)** section, click **Assign MFA device**.
4. Choose an MFA method:
 - **Authenticator app** (Recommended) – Google Authenticator, Authy, or AWS MFA
 - **Security key** – FIDO2-compatible security key
 - **Hardware TOTP token** – Physical MFA device
5. Click **Next** and follow the setup instructions.
6. **Scan the QR Code** using the Authenticator app.
7. Enter the **two consecutive MFA codes** displayed in the app.
8. Click **Assign MFA**.
9. MFA is now enabled for admin-user!

3. Verify MFA Using AWS CLI

To confirm MFA is working, follow these steps:

Step 1: Open Command Prompt

On your system, open **Command Prompt (cmd)** or **Terminal**.

Step 2: Run the get-session-token Command

Run the following command to generate a temporary session token using MFA:

```
RUN : aws sts get-session-token --serial-number arn:aws:iam::949847155882:mfa/AWS-MFA-Admin --token-code 123456
```

Replace the values:

- **arn:aws:iam::949847155882:mfa/AWS-MFA-Admin** → Use the MFA ARN from AWS.
- **123456** → Enter the **current 6-digit MFA code** from your Authenticator app.

```
C:\Users\Harshitha Basavaraju>aws sts get-session-token --serial-number arn:aws:iam::949847155882:mfa/mfa-authentication --token-code 071813
{
  "Credentials": {
    "AccessKeyId": "ASIA52J2NMSVCC4W7C2M",
    "SecretAccessKey": "5Sy41+R0odzy/bigZ0FZc8/YCTfcHMSknEuaFwZF",
    "SessionToken": "IQoJb3JpZ2luX2VjEIj////////wEaCXVzLXdlc3QtMiJJIMEYCIQDsQWwq2m+feYkVJWRk0NhDZCimSzM4JwTSNpuj+QYMagIhAPbYvnhk1r8mZ0q7dNrGtQ59co8rGcF
OUwMTt/pSun8lKvgBCPH////////wEQABoMOTQ5ODQ3MTU1ODgyIgzsvEMm1f5PPb63N9EqzAFR8SRd0JDvNHGrnmDZqr6sZmXLNbfxfTLi7DgabiZnAK700LYF0n5TdgoKQOF3lqNFta3hFIG4/y8myB
Tv/cQ8jEOpKzameaLweLoshKqFaAOA2WDKwIS1R3N+BLpYBsda6aRi1WfHQa4kTonYb0J436ZJ5XGK5SvmLqNVv9i5Vs9asKXwu4FvwLzPFLD9qt5uikEJja6sLxW2oIXlAjBXcr+Cjh3knXYF91RV5rG9HX
TuSMlXEelCnFzVEZGcutc9y2UTtgw9VCOSQkwmndy6vwY6lwGuYJgP76nMR4kFG97pazNlyWLT9aw11t/NyFnd7ISM5j7Lzi2/n6QzNgaVfL9qzfkjbrTU+XRK43qxxANBRFzqoERT+PdoaP/Zgh7FB4sLWLY
vYnmR+KL0Pvg11HtJJtxnwKaEpCaDOPrYsNw2Nya0FGoFL/NktHU+kETzMSxzOuILajp/QB82ZVSplwiqWFrqunJ4ey8Kr",
    "Expiration": "2025-04-04T03:49:45+00:00"
  }
}
```

MFA is now successfully enabled