**Services** **Targeted**: IAM, Lambda, S3, SQS, RDS, SES(If currently available in principal), VPC, Subnet, Cloudwatch

**Language**: Python

**Data**: Random sales data taken from internet (sample attached)

**Scenario**: Sales data will be put (csv file) in s3. This will trigger a lambda to generate 3 different report data. This data will be stored in RDS and, at the same time, email will be sent to users on completion/failure of process.

**Business Logic:** The business logic in lambda will be to generate report data.

1. First report should give Total Sales, Total Revenue and Total Profit for each region for specific Year-Month combination For eg: Data for Europe for 2015-Apr month.
2. Second report should give Total Sales, Total Revenue and Total Profit for the entire year for each region. For Eg: Data for Europe for 2015.
3. Third report should give No. of Units sold for each region , over a year, in offline as well as online mode.

**Technical Conditions to be fulfilled:**

1. Every lambda should generate enough logs to diagnose any problem.
2. Email should be sent on completion/failure of process
3. Business logic (report data computation) and Retrieval of file from S3 should be done through 2 different lambdas. These lambdas should communicate via SqS
4. RDS and Lambdas should be in separate Private Subnet
5. Security group should not include any address other than of required services
6. IAM role should be customized to include minimum required permissions
7. Cloudwatch should generate alarm in case there are multiple failures in lambda

Sample Data:  
